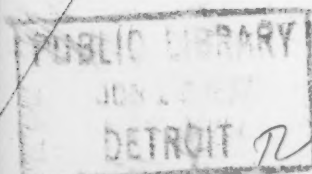


Modern

LITHOGRAPHY

.....



In this issue

NALC Report
DV-TV in Philadelphia
TAGA, R & E Meet
Three-Color: Part IV
New Dampening Units
Census Shows Litho Gains

JUNE, 1957





Hermann Zapf
gehört zur Spitzengruppe
der Schriftkünstler*

*"Hermann Zapf is 'going places' in type design!" That's the word in Europe wherever men talk type. And designers, typographers and printers everywhere are interested in his new association with Linotype.

This young leader of the type renaissance in post-war Germany has brought a refreshing airiness to layouts, with his *Palatino* and other faces. A born calligrapher, he has that rarity, a perfect "fist." *Pen and Graver*, one of his books of alphabets, has been termed "the most beautiful book in a hundred years."

Even bigger things are expected of Hermann Zapf. He represents an important addition to the great designing talents and unmatched typographic resources available exclusively through *Linotype*.

"The contribution of the contemporary designer to modern type design is to adapt established forms to meet the requirements of modern materials and production methods, and the development of the letter form to its ultimate refinement ornamentally and texturally.

"These requirements Hermann Zapf, in his almost fifty type and typographic designs, has met admirably. This is especially true in his *chef d'œuvre*, *Palatino*, and its companion letters, *Michelangelo* and *Sistina*. There is no doubt that today he is one of the world's foremost type designers. His *Pen and Graver* and *Manuale Typographicum* alone are enough to establish his name for posterity. The Mergenthaler Linotype Company is to be commended for having the foresight to enlist Hermann Zapf, with his skill, scholarship and taste, as a consultant designer." Franz C. Hess, of *Huxley House*, New York



• LINOTYPE •

Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, N. Y.

Set in *Palatino*, available on German Linotype matrices.

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FILM



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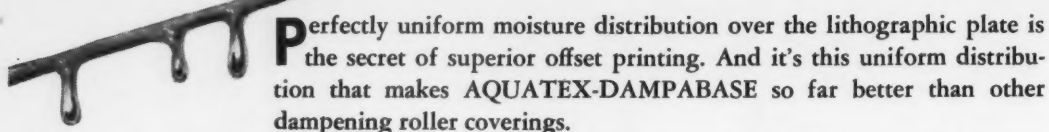
LOS ANGELES
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THE DIFFERENCE BETWEEN

EVEN DAMPENING CONTROL

and A WET THREAD



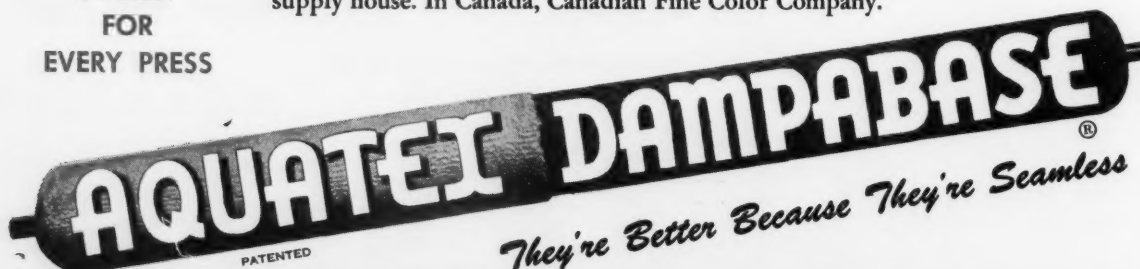
Perfectly uniform moisture distribution over the lithographic plate is the secret of superior offset printing. And it's this uniform distribution that makes AQUATEX-DAMPABASE so far better than other dampening roller coverings.

Dip an untreated thread in water, and watch the drops fall off haphazardly. This is uncontrolled moisture distribution, which leads to faulty inking and poor impressions. But the same test on chemically-treated Aquatex or Dampabase shows the tremendous absorptive power of these seamless knitted coverings—power to retain and distribute moisture evenly to every corner of every plate, and to produce better impressions consistently.

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Insist on genuine Dampabase undercushion and Aquatex outer covering for best lithographic results. Order them from your lithographic supply house. In Canada, Canadian Fine Color Company.

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EVERY PRESS

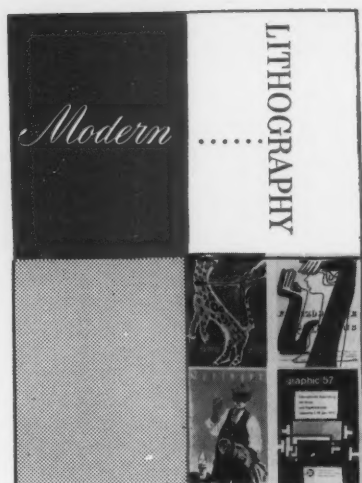


GODFREY ROLLER COMPANY

Roller Makers for 92 Years

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Quite a few lithographers are in Lausanne, Switzerland, right now, taking a look at Graphic 57, the international trade fair for the printing and paper industry. The poster in the lower right corner of the cover gives the details. Other posters show past design schools. Upper left: association of ideas—collective advertising of fur industry (1952); Upper right: modern art had early influence on some Swiss artists (1931); lower left: naturalistic tendency at its peak (1941).

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MODERN LITHOGRAPHY

VOLUME 25, NUMBER 6

JUNE, 1957

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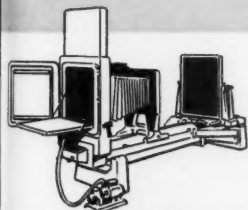
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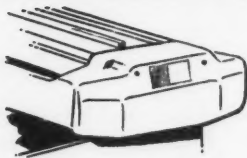
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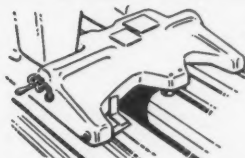
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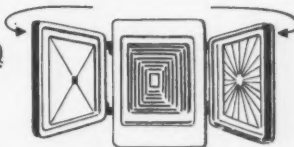
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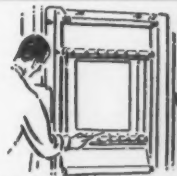
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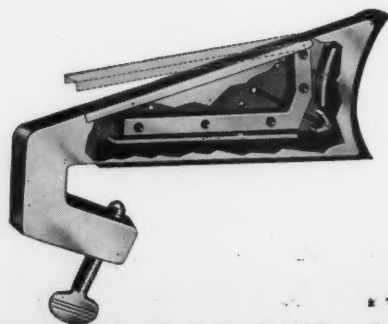
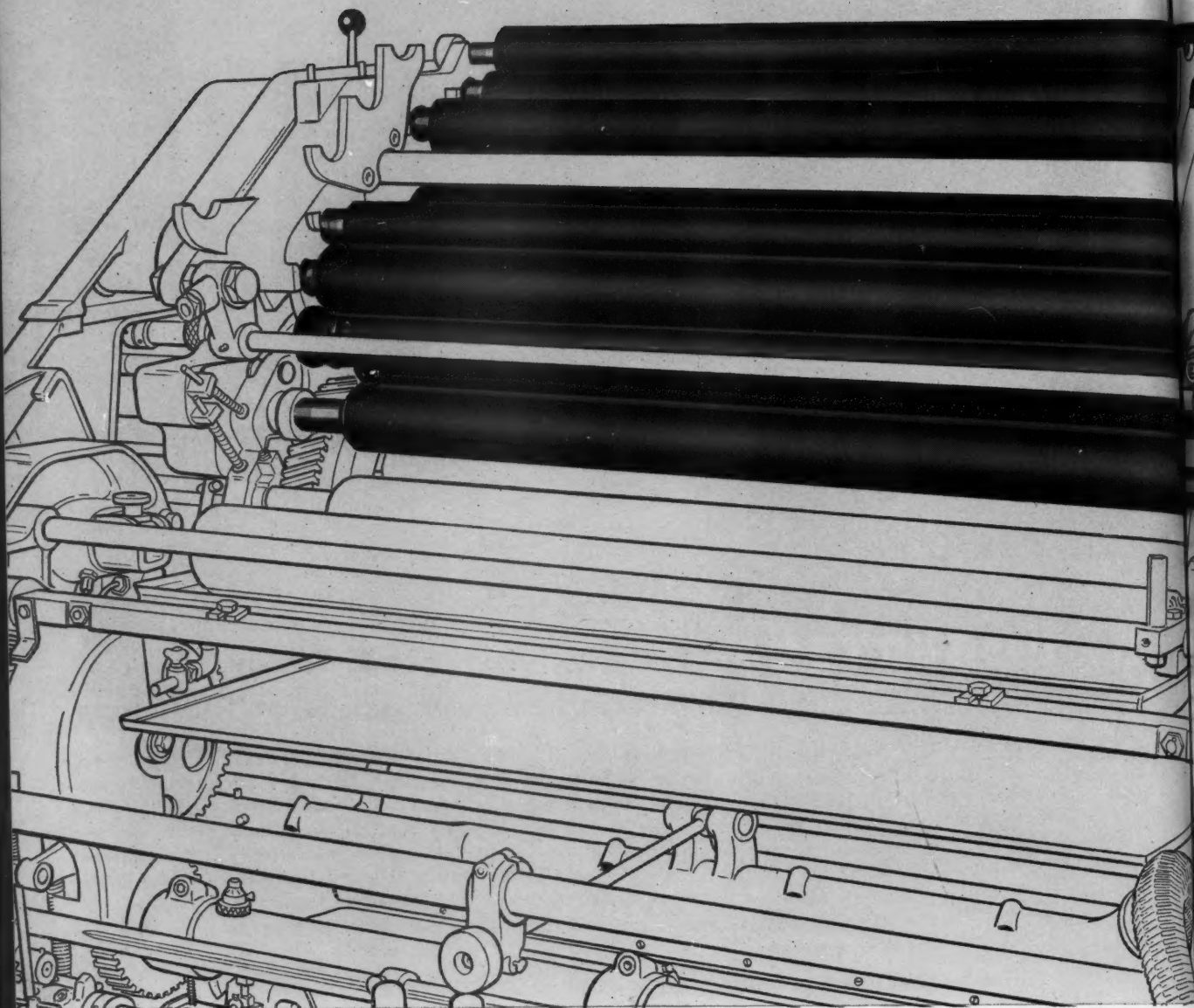
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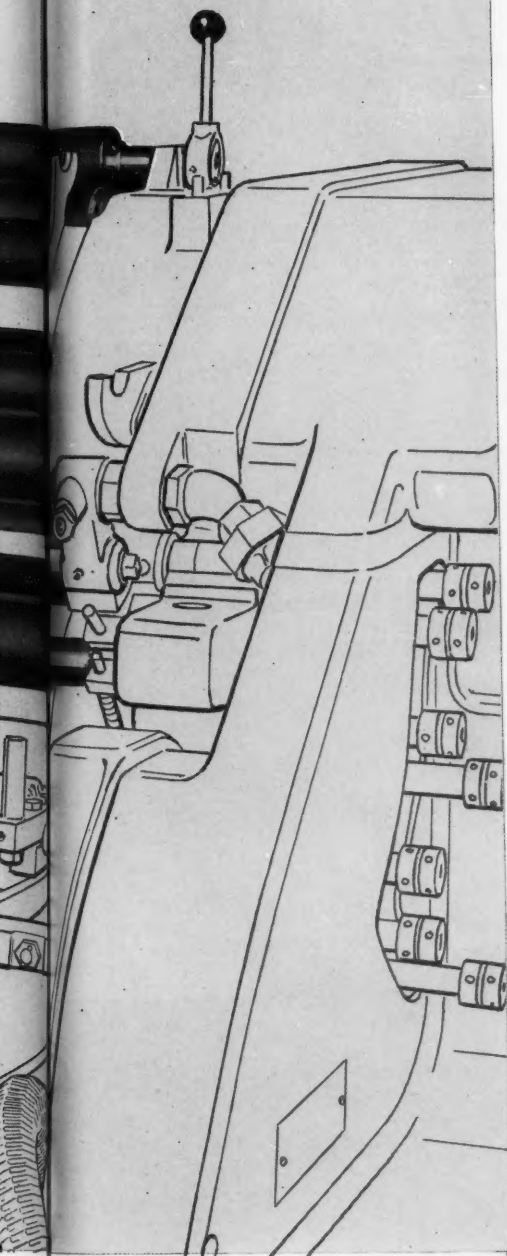
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Sure, it sounds incredible that absolute ink control can be built-in to a roller . . . even if you're talking about Dayco Offset Rollers! But, not to the hundreds of pressmen who set their Dayco rollers and leave them to run top quality, high production color jobs at maximum speed. And that holds for any day in the year or in any roller position! Result—Daycos cut downtime, improve quality and increase production up to 40%!

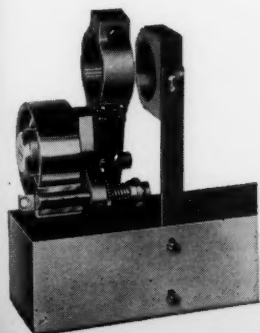
Dayco rollers are said to have built-in ink control because their performance doesn't vary. Winter or summer, they maintain their same velvety texture, same consistency and same uniform diameter—unaffected by temperature or humidity. Set them once and Dayco rollers will consistently lay a thin, smooth, even film of ink for thousands upon thousands of sharp, clear impressions. Try them the next time you buy rollers and you'll agree that your quality is better and your job time is shorter.

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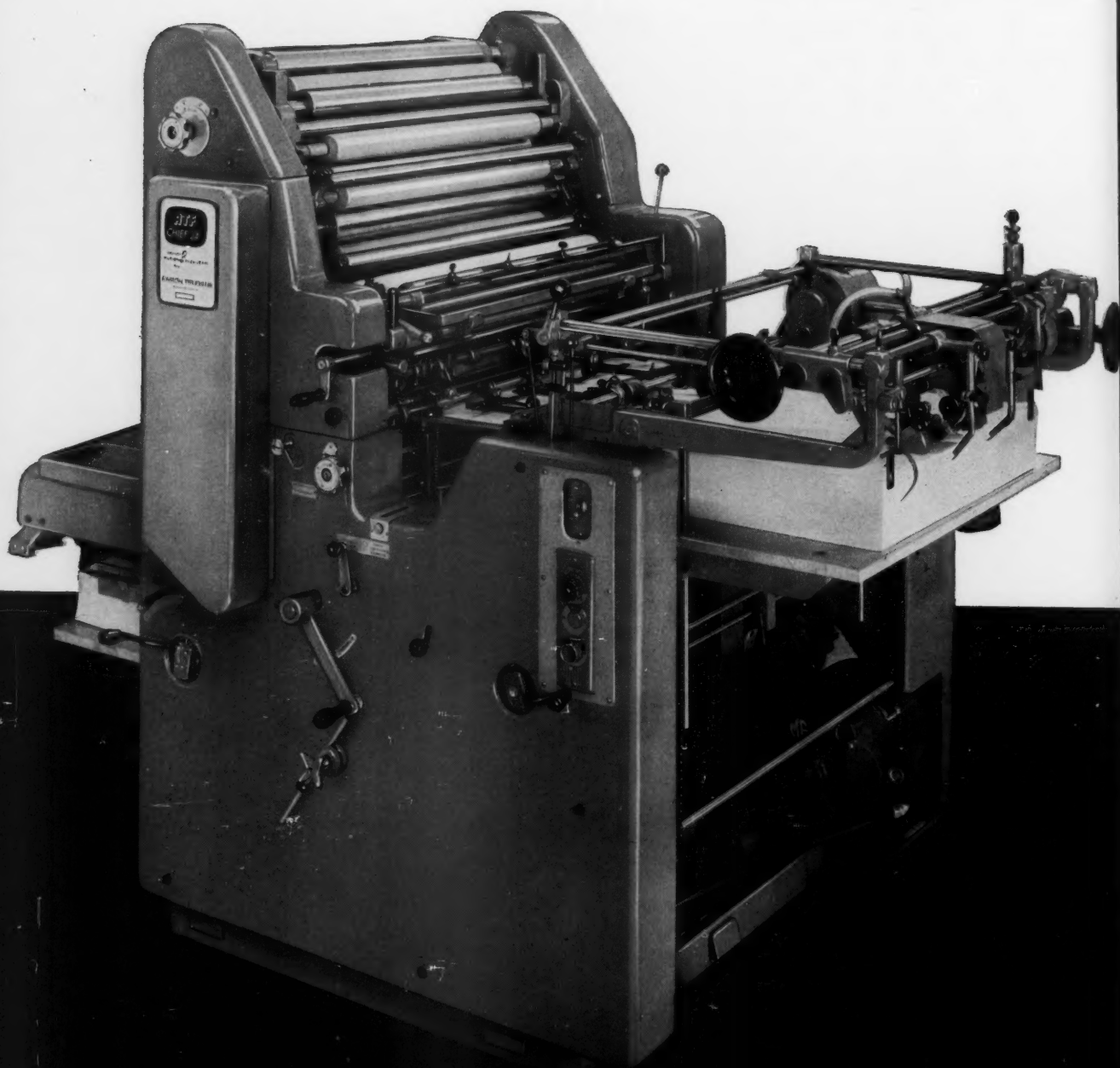
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st profitable offset press!

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Its 17¾" x 24¾" printing area and 17¾" x 24½" maximum sheet size let you print 8½" x 11" full bleed jobs four-up, with room to spare.

Is lack of extra space for equipment one of your big problems?

The Chief 24 measures 56" wide by 77" long ... uses less space than any other offset press which handles 8½" x 11" bleed jobs four-up.

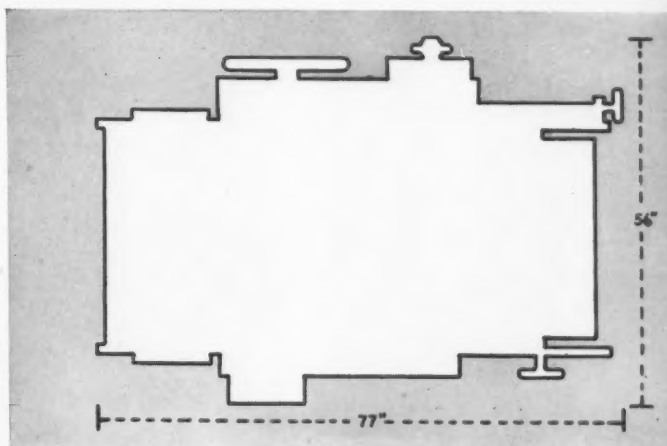
Need top-notch ink coverage, plus dependable register?

This press has both. Its 19-roller inking system (plus the fountain roller) insures good coverage. New scales on ink and water feed controls let you return to your original settings after wash-ups. Three-point register, with a pull side guide, gives the pressman hairline control.

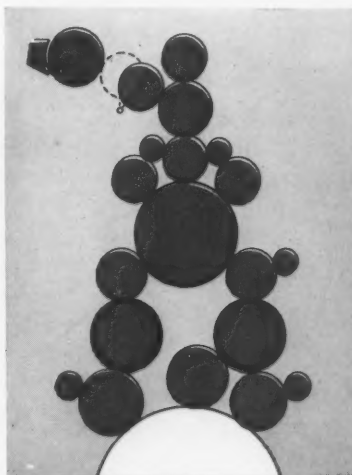
Want extra speed on long runs?

Chief 24 owners report that the Stream Feeder gives them up to 20% more speed on long runs than conventional feeders, yet it's fast and easy to set up.

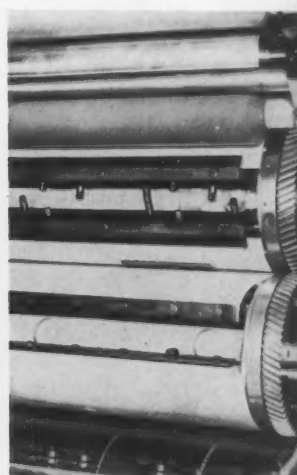
There's a lot more to the story on this Model 1200 Chief 24, and we'll be most happy to send you our "tell-all" booklet, if you'll fill in and mail the coupon. If you prefer not to wait, call your ATF representative—or your nearby ATF Branch Office—today.



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Company

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City State

Another ad
for you
this month

To make the most of the power of print
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He knows everybody's job - and understands yours

Your job is to get the best printed material possible for your company - and get it on time. The shop foreman sees that you do. To accomplish this, he knows and directs every phase of printing from start to finish. He's a prime factor in helping you get the most from the power of print.

Before you start a print job, call in your printer, lithographer or screen

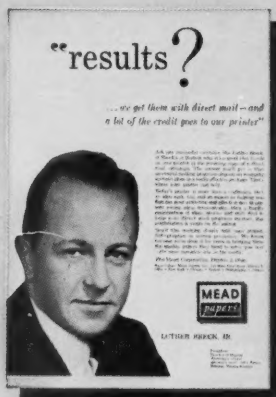
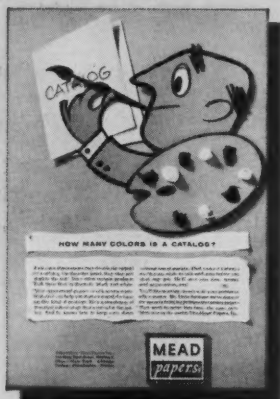
printer. Planning with him, you can avoid problems, save money and get the job out faster and better.

We know you'll like working with your printer. We've been doing it for years in bringing him the quality papers he needs to serve you best - the most complete line in the world.

MEAD
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Philadelphia • Atlanta

and another...and another...and another!



Here are *your* ads for this month! They're the latest in Mead's big advertising program that features you - the printer. This continuing program tells your customers how much they will benefit by planning their jobs with you from the start. It tells them how your help and advice will save them money. And it will help you head off problems before they start, let you schedule your work more efficiently. It's another example of how Mead works to help you and your customers work together! The Mead Corporation, Dayton 2, Ohio - producers of the world's most complete line of quality printing papers. For full information, see the Mead paper merchant nearest you.

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Boston • Philadelphia • Atlanta



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E. P. LAWSON CO.

main office: 426 West 33rd St., New York 1

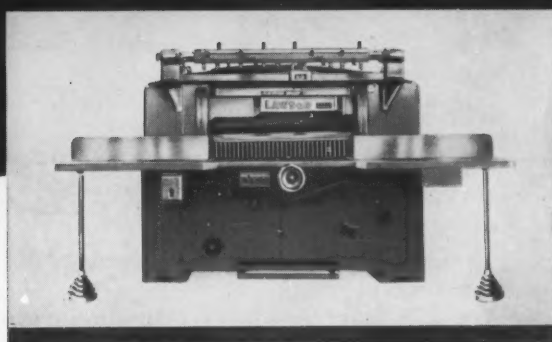
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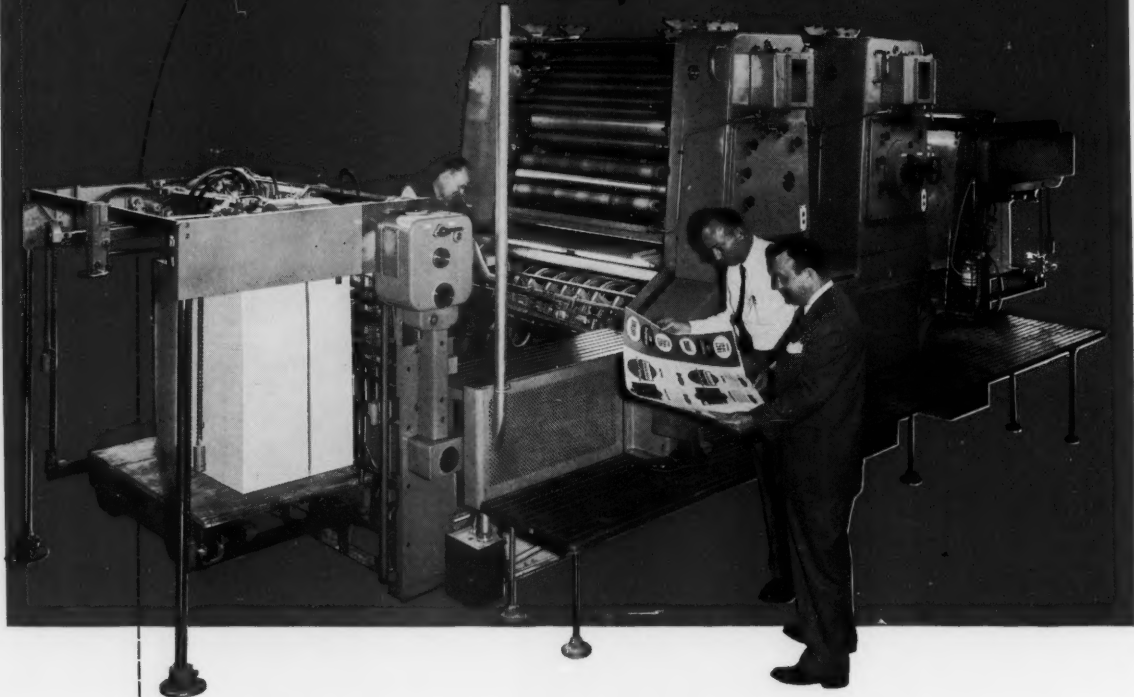
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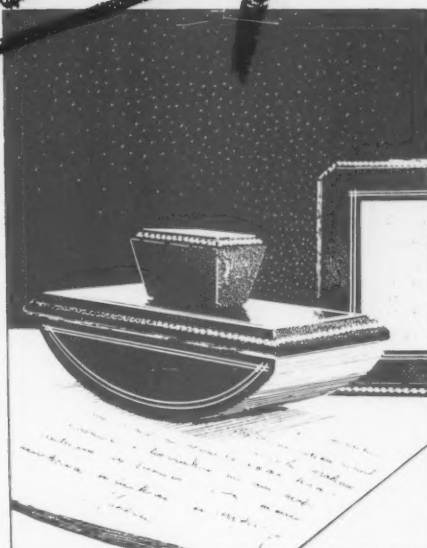
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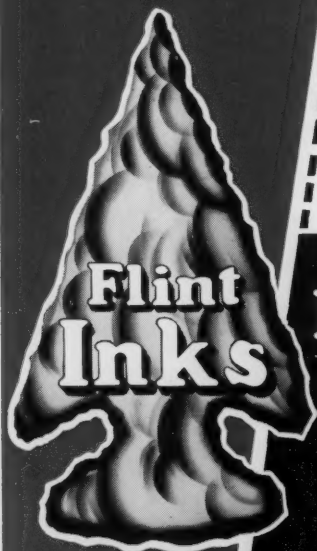
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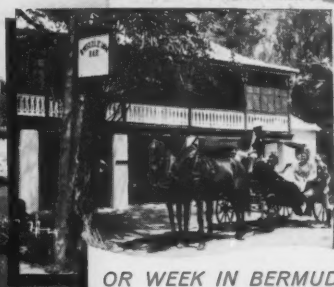
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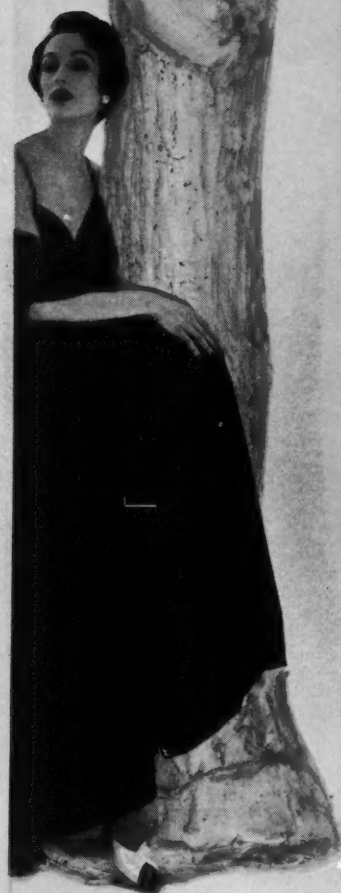
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Negliges by Blanche Lingerie

A black and white photograph of a woman with dark hair styled in a bun, wearing a long, dark, sleeveless dress. She is standing next to a large sheet of paper that has several abstract, sketchy drawings on it. The background is a light, textured surface.

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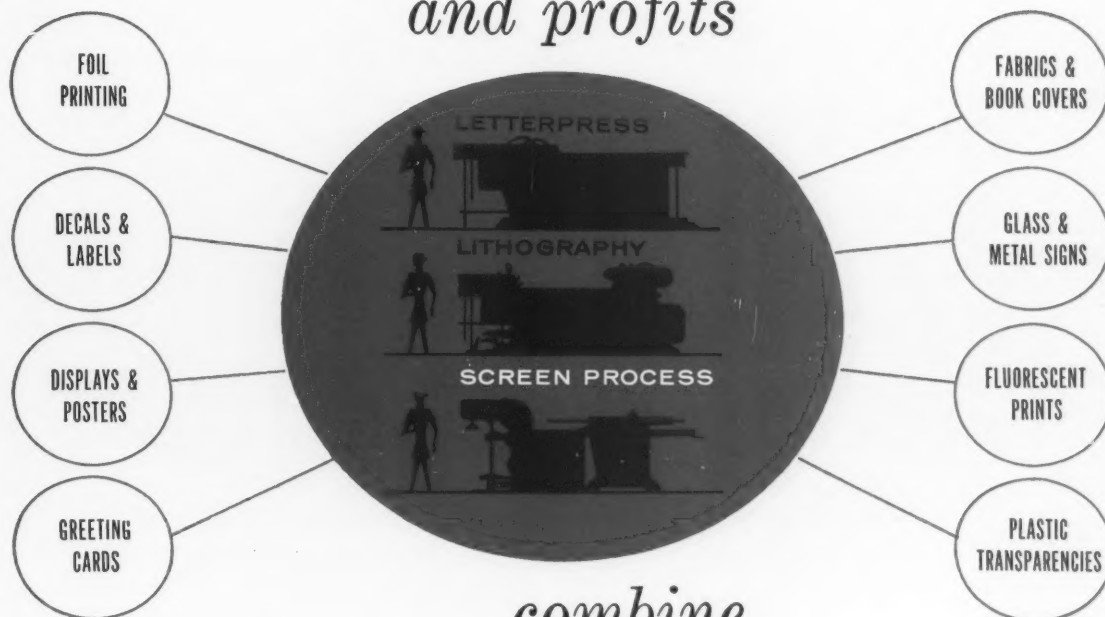


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EDITORIALS

E Pluribus Unum

IN union there is strength. Also, unfortunately in a few cases, there is greed and corruption. Two concurrent union situations last month showed, by striking contrast, these two situations.

The first situation was the shocking charges made in the McClellan Committee about the activities of the teamster's union and the alleged misuse of union funds. All the nation was alarmed, other union officials were seeking to clean house, and there were reports in Congress of stiffer controls over unions.

It was never more apparent that vigilance is indeed necessary to prevent situations of this type from developing. Union members who don't care what happens to their money have little excuse for complaining when someone makes off with it.

Even as the McClellan Committee was planting a black eye on some union practices, our litho union, Amalgamated Lithographers of America, was continuing to add lustre to its reputation. In New York, Local 1 was cited by Mayor Wagner for "ideal unionism," including its remarkable 35-year no-strike record. At the same meeting, blinded columnist Victor Riesel accepted, along with the Mayor, honorary membership in ALA. He declared that apathy of union members "has opened the doors for dirty unions."

The *New York Times* summed it all up in an editorial on "Good and Bad Unionism," which mentioned the 75th anniversary of ALA as a "good opportunity to give accent to the positive." And *Newsweek* magazine called ALA a "feather in the cap" of otherwise bad union publicity.

ML joins in praising the fine record of ALA and wishes it many more years of cooperation with management that is profitable to both sides of the bargaining table.

Automation . . .

EVERYBODY'S talking about "automation" these days. Everybody, that is, but MODERN LITHOGRAPHY. We think the word is foolish and unnecessary. It presumably refers to scientific developments which simplify work and make possible production with more machines and fewer workers. Is that a new concept? Balderdash. We've had "automation" ever since that far-sighted cave-man, tired of pulling his cart with square wheels, startled his conservative friends by rounding them.

It will be time enough to start talking about "automation" when all of us are born with IBM holes pre-punched in us and with that favorite slogan of the positive-thinkers, "THINK" stamped indelibly on our brows.

. . . and Visitation

ANOTHER word that bothers us stuffy grammarians is "visitation," widely used to indicate a visit to a plant or shop. We always thought a visitation was the appearance of a ghost, an official visit by a high religious leader or the like. In checking back with the dictionary, however, we came upon another definition that may support the use of the word: "resort to a place by birds, mammals or other animals, at an unusual time or in unusual numbers."



N.
A.
L.
C.



1st Row: (l-r.) New president J. Leonard Starkey presents Senefelder bust to retiring president R. Walter Blattenberger; President Starkey points to map showing three regional meetings scheduled for next January; Joseph Kremer, Rochester; Willis Perry, Chicago; and Charles Spiro, Litho Chemical. 2nd Row: Speaker A. N. Spence, Jack Stout, Sam'l Stout & Co.; Keith Nickoley, Roberts & Porter; Stuart Holford, Harris-Seybold; D. G. Manley, ATF; Mrs. Fred Fowler, Washington; Mr. and Mrs. Blattenberger. 3rd Row: Dan Ford, New York; Fred Adame, R. Hoe; William Gegenheimer, Wm. Gegenheimer Co.; Gus Reischel, Ideal Roller; Martin Hollander, Anchor Chemical; Andrew Balika, Cleveland; George Sutton, Canton; Russell Waddell, Harris-Seybold. 4th Row: Jack Hagen and Herman Schultz, both Chicago; Paul Hansen, Litho Plate Graining; Thomas Boram, Baltimore; James H. Sutphin, Braden-Sutphin; Miss Elaine Tobin; Joseph Peroutka, Baltimore; Mr. and Mrs. John Murphy, Detroit; Mr. and Mrs. Harvey Webb, Philadelphia. Mr. and Mrs. Starkey, Dayton. 5th Row: Eugene Hanson, St. Louis; Herman Goebel, Twin City; R. H. Wybest, PDI; James Ludford, Chicago, Mr. Balika; Stephen Rubenstein, Philadelphia; Edward Farrell, Jack Reedy, and Mr. Ludford, all Chicago; Chester Woods, S. D. Warren.

'Best Convention In Years'

Delegates praise well-organized Chicago meeting, practical program of help to clubs

ONE of the most successful conventions in recent years was held last month by the National Association of Litho Clubs in Chicago, with bigger attendance than usual and real interest in the program. The three-day meeting was held in the Palmer House Hotel in Chicago, May 2-4.

There was none of the prolonged bickering that marred last year's meeting in Baltimore, when there were arguments about dues, representation, and administration of the National Association.

A litho quiz panel and a series of round table discussions employing no less than 21 graphic arts representatives comprised Saturday's program, but these sessions, lively and provocative as they were, were overshadowed by three discussions on the opening day when problems of administration, education and social activities for local clubs were discussed.

There were no formal talks on the program, aside from a luncheon address by A. N. Spence, director of the publications division, administrative office, Navy Department, and an informal and humorous address on Chicago at Saturday's luncheon by Dr. Preston Bradley, a Chicago religious leader.

Starkey Elected

The business sessions went along smoothly, with unanimous approval

of almost every action taken by the association. In the election of officers, J. Leonard Starkey, of the Dayton Club, was moved up to president, succeeding R. Walter Blattenberger, of St. Louis. Sol D'Alessandro, of Cleveland, who had served as an officer of NALC for several years and who would normally have moved up to president, reluctantly stepped out of the picture because of ill health. Also elected with Mr. Starkey were Herman Gobel of Twin City, first vice president; Fred Fowler, of Washington, second vice president; and Rae Goss, of Chicago, treasurer.

President Starkey announced the

following appointments: Edward Bode, of Dayton, executive secretary; Daniel Ford of New York, John Murphy, of Detroit and William Dodd, of Houston, assistant secretaries; William Staudt, historian; and W. O. Morgan, of Chicago, field organizer. Mr. Starkey also appointed Curtis Corey of the Tulsa Club as parliamentarian.

Judging by the comments of the delegates, the Friday afternoon session was one of the most productive ever held at an NALC convention. James Ludford, of Chicago, led off with a discussion of administration problems which face all Litho Clubs. He traced the rapid growth of the lithographic industry during the last several decades, but remarked that litho clubs have not grown with the industry, but are lagging far behind.

Membership Should Grow

"There are many more lithographers in this country who should be members of local litho clubs," he declared, "and with the right kind of promotion we can get many of them to join our clubs." He offered two general recommendations to local clubs:

1. Run all activities so that you will make a profit from them. Charge sufficient dues to finance an adequate program for the club.

2. Outline responsibilities of all

Next Year

The 13th annual convention of the NALC will be held May 1-3, 1958 at the Shoreham Hotel, Washington, D. C., with Albert Tucker of the Washington Club as convention chairman. For the following year, 1959, the delegates voted to award the convention to the Twin City Litho Club, comprising Minneapolis and St. Paul. The Dayton, O., club placed second in the balloting for the 1959 convention city.

Quiz Panel, Round Tables Draw Capacity

THERE was a wide diversity in type of questions asked at the litho quiz panel session Saturday morning at the NALC convention in Chicago. Unlike most quiz panels of this type, there was no special emphasis on any particular topic.

The following panel members answered questions at the session:

CAMERA: Charles Roeder, Roeder Studios, Chicago. CHEMISTRY: Paul Hartsuch, Interchemical Corp, Chicago. COLOR SEPARATIONS: Frank Preucil, Lithographic Technical Foundation, Chicago. METAL DECO-

RATING: Harold Lee, J. L. Clark Mfg. Co., Rockford, Ill. PLATES: Don Grant, Litho Chemical & Supply Co., Chicago. PRESS: (Sheet fed) Otto Smith, Photopress Inc., Broadview, Ill. PRESS: (Web Fed) Reginald F. Wardley, National Blank Board Co., Holyoke, Mass. TECHNICAL DEVELOPMENTS: Michael H. Bruno, LTF, Chicago.

Here are some typical questions and answers from the quiz panel:

Q: Is there any particular advantage in using very fine screens in lithography, or do the coarser screens do an adequate job?

ROEDER: The 130-line screen will

normally handle most lithographic jobs satisfactorily. Beyond that it is quite tough to be successful. BRUNO: There is virtually no advantage in going beyond 150-line screen for most lithographic jobs.

Q: We have trouble with plates breaking at the edges in our web off-set press.

WARDLEY: This problem is most prevalent with zinc plates because of the sharp edges on the press. One remedy is to bind the lip down on the

officers of your club. He suggested preparing a booklet listing all officers, with their addresses, a seating chart for dinner and board meetings, and a full description of the duties and responsibilities of officers.

3. Promote your club in every way possible. Mr. Ludford suggested using the Senefelder lapel pin, regular mailings to all members, advising them of activities and of plans for the future, and advertisements in trade magazines, both local and national, to stimulate interest in the local club.

Mr. Ludford also displayed a number of four color brochures and pamphlets put out by the Chicago club, which he said had been very well received by the members. He admitted, however, after questioning, that not every club could afford such a lavishly printed program because it depended a great deal on generosity of local suppliers.

The problems involved in getting good educational programs for Litho Club meetings were outlined by Andrew Balika of the Cleveland club. "Good educational programs are the backbone of the local clubs," he asserted.

Sources for Programs

He said there are a number of sources for ideas for these programs, including national trade magazines and publications put out by research Institutes, and he offered the following points to be considered by the educational committee of each club:

1. Determine the occupations of all club members for use as a guide for scheduling programs.
2. Keep your programs uniform in time.
3. Avoid the use of too many talks. Try to supplement these with movies and demonstrations wherever possible

so that lithographers can profit by seeing as well as hearing.

4. Because of the big turn-over in club members it is often advisable to reschedule an interesting program every four or five years since a large majority of the members will not have heard it the first time and even they will profit by hearing it again.

5. Start the meetings promptly as a courtesy to the guest speaker.

6. Discuss with the speaker beforehand the subject and the time to be allotted, so the speaker can plan his talk.

7. Arrange quiz panels for technical discussions, and wherever possible use local talent.

8. Read trade journals for suggestions for programs given at other Litho Clubs.

9. Provide an overlap of the term of office of the educational committee so that it will have several months to

Also at NALC (l-r.): Albert Kuehn, Miehle; Al Reitz, IPI; Detroit; Martin Hollander, Anchor Chemical; and Robert W. J. H. Malloy, Detroit; Willis Perry, Chicago; Joseph Masura, Polzin, Sur-Dot Litho Supply.



press so that is not quite so sharp, or to change the gap with a new lockup. I have heard of one lithographer drilling small holes along the edge near the lip to even out the stress on the plate.

Q: We have trouble with grainy solids on aluminum and zinc plates.

BRUNO: Water is one of the biggest causes of this graininess and if possible you should cut it back.

Q: What is the best counter-etch to use with an aluminum plate?

HARTSUCH: That is a hard question to answer because there are several

Quiz panelists and round table discussion leaders form a big group in the hotel auditorium.



that can be used successfully, among them hydrochloric acid, oxalic acid, acetic acid and trisodium phosphate.

Q: What happens when ink dries?

HARTSUCH: There is a very inter-

esting series of things which take place when ink dries. First of all there is an induction period during which no change takes place in the
(Continued on Page 129)

prepare future programs after the top officers of the club have been elected.

10. The educational chairman should, if possible, be a man who has frequent contacts in all parts of the city so that he can keep abreast of the new developments in lithography and also can discuss with a variety of members the types of programs that interest them.

11. Put new members on the educational committee each year to get a fresh approach.

Review Past Program

12. Review past programs for the previous five years to determine the attendance and interest in each as a guide in preparing future programs.

13. Make up a list of potential programs and present it to the board of directors each season so that a well-rounded program for the entire year can be chosen in advance.

The social functions which contribute to the success of Litho Clubs were discussed by Stephen Rubenstein, of Philadelphia. Mr. Rubenstein was quick to point out that the dissemination of knowledge is the primary purpose of the clubs, but he added that good-fellowship also is important.

Mr. Rubenstein stressed the importance of having good social activities every month, not just once a year as an annual event. He said this can be attained by having, first of all, a good meeting place where the club members will feel at home. He added that it is advisable to keep the same meeting place permanently if it fills the club's requirements.

For the annual functions, such as ladies' night, Mr. Rubenstein gave a number of suggestions.

Another annual function which he said contributes to the social success

of the club is an outing, for men only, normally at a country club.

Plan Social Programs

In all these activities, he advised, it is essential to plan them well ahead of time, to make a careful selection of the place where they are to be held, and to plan the social program with an eye toward the interests of all the club members.

In a question period which followed these three discussions, the following points were brought up:

Dinner meetings normally are more successful than after-dinner meetings, although several clubs have success with the latter method. One drawback to a dinner meeting, a delegate suggested, was that men in the shop who stand to profit most from the technical programs and demonstrations, can't afford in some cases to

(Continued on Page 117)

In the Palmer House (l.r.): Fred Fowler, Washington; Harry Mueller, Litho Chemical; Kenneth Waughtal, Eastman; Leonard Plummer, Di-Noc; T. S. O'Brien, K. Schlanger Co.; Mr. and Mrs. Howard Phillips, and Mr. and Mrs. Oliver Schuermann.



"... Purchasing and advertising production men are not infallible... Yet, how many of you will take the time to quote on the job as requested and at the same time offer an alternate set



Lithography's Real Potential, or Are You Satisfied With your Salesmen?

By Louis A. Squitieri
Division Purchasing Agent
U. S. Rubber Co., New York

WHY has lithography enjoyed such a big growth in recent years? In its initial stage offset had a terrific price advantage over existing processes. This price advantage was a great factor in promoting the popularity of the process in the purchasing, advertising and sales promotion fields.

In addition, a great deal of credit must be given to the Lithographers National Association, the Lithographic Technical Foundation and the suppliers.

The purchasing agent also has

From a talk delivered at LNA's 52nd annual convention, at The Greenbrier, White Sulphur Springs, W. Va., April 3, 1957.

played a big role in this growth. At times, he may have been a thorn in your sides, but he insisted on and received quality, service and competitive prices. In your efforts to satisfy the purchaser, you have improved your cost systems, your scheduling, your quality, and your deliveries.

You were given the opportunity, you developed a new process and you have assumed a great responsibility. You cannot coast along on your past performances. *The price advantage over letterpress has gradually disappeared, because of increased labor and material costs.* In addition, the economies of good purchasing have been recognized. To further these econ-

omies, the profession of purchasing has become specialized. We have men who buy nothing but fabrics, others who buy chemicals, others who buy machinery, and still others who buy printing and lithography. Each is a specialist in his own field. The process that can best do the job is the process selected by the purchasing man.

Salesman Is Important

The most important manner in which the assets of lithography can be promoted is through the salesman. Purchasing men enjoy interviewing salesmen who are thoroughly conversant with the products or services

"... The purchasing agent is vitally interested in saving money. The lithographer who displays this same interest will end

of specifications, pointing out to the purchaser that a few minor changes in the specifications will reduce the cost of the job without materially affecting the quality of the finished piece?"

they sell. They do not enjoy interviewing a person who calls himself a salesman but is actually an imposter taking up valuable time.

Lithographic salesmen are the responsibility of your industry. Are you satisfied with the men who represent you? I do not refer to the amount of business that they write. I do refer to the manner in which they promote the techniques and capacity of your plant.

Do they understand what happens to a piece of printed matter in your lithographic plant?

Can they give advice on how art should be produced to achieve a desired effect?

Do they understand the limitations of paper?

The more competent a salesman is, the more the buyer will rely on his judgment, and the more business his plant will do. After a salesman receives an order, he ceases to be a salesman representing your company, he becomes our representative in your plant. In fact, he is our only contact with your plant. Be selective in the choice of your potential salesmen. The men in your shop must go through apprenticeship before they become journeymen. The salesman is no different. He must go through the various phases of training, and only after he has passed his apprenticeship

should he be permitted to go out into the world as a journeyman salesman. The best advertising for a lithographic plant is a good salesman.

How often do you receive art work from your customers that will not give the desired result? Yes, you accept the art work and your craftsmen will work and work to secure the desired result. When the job is completed, you find that you have incurred many additional charges that were not included in your original estimate. You have either to absorb these costs or start additional negotiations with your customer. The desire of any purchasing agent is to see that a job goes through production without problems. It is also his responsibility to see that the job is purchased as economically as possible according to the established specifications.

How can you help the purchasing agent? Your quotation form should be spelled out. It should not contain just title of job, quantity and price. It should give complete specifications. I find that one of the major reasons for "extra" charges involves halftones. Your quotation form should include the actual number of halftones, stripped in or in position, etc. In this manner there is no question as to what you included in your quotation. Future negotiations can

then be based on fact rather than guesswork.

Help the Artist

How many times have you said to yourself, "If we could have talked to the artist, a lot of the hand work could have been eliminated?" Yes, this is said daily, yet very little has been done about it because of course art is the buyer's responsibility.

But why have lithographers done so little to educate artists in the techniques of lithography? It seems to me that lithographers can do a magnificent job for their industry as well as benefit the budget-controlled buyer by getting across some inkling of costs to the people who create a printed piece. I do not mean to suggest that artists limit their freedom of expression by submitting to the rule of the dollar sign, but they should be made aware of the additional costs incurred by last minute changes. There should be a common understanding between the lithographer and the artist as to where the work ceases to be art work and becomes work of the lithographer. It should not merely be purchasing agents, production men and buyers who should be given the grand tour through the litho plant. The artist needs it as much.

Purchasing and advertising pro-
(Continued on Page 118)

up with an order . . . It would be a simple matter, when you come across an idea, to rough up a dummy and present it."

In Philadelphia, hardly anybody read the **Bulletin** at **DV-TV** **Forum**



*Lone lithographer in the rear of the Benjamin Franklin ballroom, obviously at the DV-TV program just for the coffee breaks, vainly tries to uphold the slogan of the *Philadelphia Evening Bulletin* while his companions learn all about the latest techniques of lithography.*

PHILADELPHIA got its first look last month at the popular closed-circuit TV demonstrations that the Lithographic Technical Foundation has been putting on around the country. Notwithstanding the fact that there have been two such programs nearby in New York within a year, the Philadelphia program, called Delaware Valley TV, attracted nearly 1000 lithographers.

A good percentage of these were from Philadelphia and vicinity, but hundreds of others came in delegations from Washington, D.C., Baltimore, Wilmington, Camden, N.J., Trenton and even New York. In many

cases foremen and supervisors brought along half a dozen or more men from various departments in their shops.

The program followed the lines of those in other cities, but according to several persons who had attended other programs, the Philadelphia show was better organized, more smoothly run, and generally more successful. LTF staff members commented on the attentiveness of the audience throughout the sessions in the Benjamin Franklin Hotel, May 10-11.

The Washington Litho Club joined with the Philadelphia club and seven other Philadelphia organizations, in-

cluding Local 14, A.L.A., in sponsoring the program. Howard Harcke, of Graphic Arts, Inc., Philadelphia, was general chairman. Ushers were shop members from Ketterlinus Lithographing Co.

TV Demonstrations

In TV demonstrations Friday evening, Frank Preucil, Charles Borchers, Dr. Robert Reed, Edward Martin and Michael Bruno dealt with making halftones and contacts, paper troubles on the press, ink problems, and surface and deep-etch platemaking.

Mr. Preucil outlined the theory of

Frank Preucil (l.) demonstrates that the eye can easily be fooled in demonstration at DV-TV. Edward Martin talks about

litho plates and handling them on the press. Philadelphia committee (r.) takes care of registrants at the two-day forum.



the halftone, differences between glass and contact screens, effect of exposure on shadow patterns behind the screen, use of lens stops, figuring screen distance, focusing and counter-acting lens flare.

"No one screen will do everything in photography," he concluded, "each has its advantages. It is up to the cameraman to make best use of both glass and magenta contact screens."

Mr. Borchers concerned himself with some simple but extremely valuable hints on handling paper, determining felt and wire sides and grain direction, and ways to counter some of the common troubles on the press. Mr. Reed appeared on the 20 TV sets in the ballroom with a similar discussion of ink. He dissected the causes of offsetting, drying failures, chalking, scuffing, tinting, slurring and hickies.

The demonstration of platemaking, including the reasons for each step, concluded the TV portion of the program.

Plates Improved

Mr. Bruno opened the Saturday morning program with an in-person talk on bi-metal and presensitized plates. "The inconsistency of offset plates, which prevailed after World War II, stimulated research on the subject," he recalled. "The lithographic system was hindered so much by poor and inconsistent plates and temperamental dampening systems that there was great enthusiasm for 'dry offset' which would eliminate



Philadelphia chairman Howard Harcke greets Mike Bruno at DV-TV forum.

the dampening system. But there have been so many major improvements in plates in the past 10 years that there is very little interest in dry offset," he declared.

"Today we are running with less water, finer grains and finer screens, and we are getting much better images consistently," he explained. "Nowadays there is no excuse for a bad plate going to press," he emphasized.

He went on to say that the two most important considerations in making litho plates are these:

1. Tone values must be right (they can be checked with an LTF Sensitivity Guide).

2. The image area must receive ink and the non-image area must reject ink (he listed some chemicals that help make this possible).

Mr. Bruno made the comment that

acid and gum are used in the dampening solution not for the litho plate but to keep the dampening system in good working condition.

Another comment that aroused the audience was Mr. Bruno's remark that he knows a lithographer who is in favor of doing away with the litho blanket. "The reason we used the blanket in the first place was because of the rough grained plates and rough paper stocks," Mr. Bruno explained. "Now, with smooth plates and coated paper, maybe direct lithography would work."

He went into considerable detail on bi- and tri-metal plates, citing the tendency of certain metals to repel ink and attract water, and vice versa. "Multi-metal plates take lots of abuse, yield high quality and are good for exceptionally long runs," he stated.

He followed with a discussion of presensitized plates, which he praised for their convenience, speed and high quality. "I wouldn't be surprised if, in five or 10 years, all plates are presensitized in one way or another," he predicted.

One drawback of these plates is their poor resistance to abrasion, he commented, but this defect can be greatly remedied with proper pressure settings on the press.

Handling Plates

Mr. Martin followed with a down-to-earth discussion of handling plates on the press. He used a film to demonstrate the effect of various coatings

(Continued on Page 141)

Coffee break time at the forum (l.) as nearly 1000 lithographers from the area take time out from closed-circuit tv demonstra-

tions. At right, program committee members have lunch together at the Saturday session. Forum was held May 10-11.



TAGA

*hears report on 'hue errors';
yellow inks generally good, but
wide deviations noted in magenta.*

A MAJORITY of color lithographers recently surveyed in the United States are using inks that have such large "hue errors" that it is "almost unbelievable." The errors, in the case of magenta inks, run between 25 and 100 percent, with three-quarters of those surveyed beyond 50 percent.

These conclusions were offered in a paper presented by Frank Preucil, of the Lithographic Technical Foundation, at the 9th annual meeting of the Technical Association of the Graphic Arts, in Philadelphia last month. The three-day meeting was held in the Benjamin Franklin Hotel,

May 13-15. Attendance was slightly under 300.

Mr. Preucil, listing the results of an

Next Year

Next year's TAGA meeting will be held in the Beverly Hilton Hotel, Los Angeles, June 23-26, 1958. The following year, 1959, the group will meet in Rochester.

LTF survey of process color inks, in which 170 specially designed color

test strips were returned, summarized his findings as follows:

1. No single masking system can correct hue errors in all cases.
2. Better selection of ink hues is needed in most cases.
3. Some multi-color presses give better results than single color presses.

Color Wheel

The speaker, who used slides to illustrate his talk, first described the design of the test strip and the way it was analyzed by plotting points on a color wheel. He said an analysis of the strips returned by lithographers

At TAGA (l-r.): W. A. Goldsmith, Edward Stern & Co.; R. J. Lefebvre and D. D. Choha, both Government Printing Office;

Robert E. Rossell, TAGA president; Joseph Mazzaferri, Philadelphia chairman for the TAGA meeting at Ben Franklin.



New TAGA Officers (l-r): Front—Benjamin Sites, Miehle, secretary-treasurer; Philip Tobias, Edward Stern & Co., 2nd vice president; Virgil Barta, Eastman Kodak, president; Frank Preucil, LTF, 1st vice president. Rear: Robert E. Rossell, past president; and William T. Reid, Battelle Memorial Inst.



from all parts of the country showed that only two of 125 were within five percent of color correction for cyan and magenta with one mask.

As far as ink hues go, he advised, the yellows being used generally are pretty good, with hue errors limited to about 10 percent. The magenta error is biggest, from 25 to 100 percent, and the errors in cyan fall somewhere between those for yellow and magenta.

Mr. Preucil went into a technical discussion of masking problems, overprinting inks and resultant hue shifts, additivity failure, paper considerations, and trapping problems.

He commented that while "the hue errors seem almost unbelievable," the printed results are fairly good. "But they could be greatly improved with closer attention to ink hues," he concluded. (See Mr. Preucil's article on the color wheel, on page 64 for another aspect of his research at LTF.)

Mr. Preucil's talk and one by John Rheinfrank, of Battelle Memorial Institute, Columbus, on lithographic reproduction directly from xerographic plates, were of prime interest to lithographers attending the sessions.

Dr. Isay Balinkin, of the University of Cincinnati, was the banquet

speaker, on "Color in Your Life." He used a number of amusing anecdotes and electrical devices to show that the eyes can easily be fooled by color.

Barta Elected

Virgil Barta was elected president of TAGA, succeeding Robert E. Rossell. Mr. Preucil was moved up to 1st vice president, Philip Tobias, Edward Stern & Co., was elected 2nd vice president and Benjamin Sites, of Miehle Printing Press & Mfg. Co., was named secretary-treasurer.

Abstracts of some of the other TAGA papers will be printed in future issues of ML.★

Left: Albert Materazzi, Litho Chemical, talks with Joseph Winterburg, Phillips & Jacobs. **Right:** Daniel Smith, Interchemical; Bernard Halpern, consultant; Herbert P. Paschel, consultant



and ML's Photo Clinic columnist; H. H. Lerner, Triton Press; and F. L. Wurzburg Jr., Interchemical Corp. The TAGA sessions were held in Philadelphia May 13-15.



R & E Hears Progress

THE Research and Engineering Council of the Graphic Arts paused, at its annual meeting in Philadelphia last month, to take an inventory of accomplishments during its first seven years and to take a look at what is needed in the graphic arts in the years ahead.

Two hundred technical men from lithographic, letterpress and gravure plants as well as from research institutions met at the Benjamin Franklin Hotel May 15-17 for two days of research reports, panel discussions and committee meetings. The R & E Council meeting followed hard on the heels of the TAGA meeting at the same hotel. In fact the technical men held joint trips to graphic arts points of interest on Wednesday, May 15, last day of TAGA and first day of the R & E meeting.

Virtually all of the research work of the Council is done in five basic committees. These groups, in turn, "farm out" portions of their work to task groups.

Five Basic Committees

The five committees reported to the members on their work to date and asked for suggestions for future projects. The groups received high praise for the projects which have been completed and for assignments still in work.

In outside research reports summarized by Alan S. Holliday, of Hughes Corp., secretary of R. & E., the one of most interest to lithographers was announcement that

American Type Founders has developed a typesetter for the photographic composition of text matter. "It is a small, compact machine with an original approach to phototypesetting. Corrections are made easily, quickly and with very little expense. The price of the machine is expected to be within the purchasing ability of all printers. Marketing plans are not available at present," according to a report from ATF.

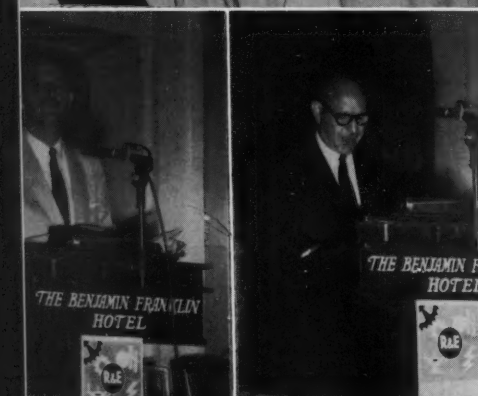
To letterpress research men, interest centered on a report from DuPont announcing it has made "substantial progress" toward development of a presensitized, lightweight, flexible plastic printing plate of potentially wide use in the letterpress field. The image is formed by a chemical change in the light-sensitive plastic during exposure through a high contrast photographic negative. Unexposed areas are washed out, leaving a relief of up to 40 thousandths of an inch. There were many other reports on litho research.

New Officers

Felton Colwell, Colwell Press, Inc., Minneapolis, was reelected president of R. & E. Council. George H. Cornelius Jr., Cornelius Printing Co., Indianapolis, was named 1st vice president; Mr. Holliday was named 2nd vice president; and C. L. Jewett and W. R. Spiller were chosen to serve as secretary and treasurer, respectively. Robert E. Rossell continues as managing director.

The meeting was formally opened

R. & E. speakers, top to bottom: Samuel F. Chernoble, general chairman of the meeting; Alan S. Holliday, director of research, Hughes Corp.; C. M. Flint, consultant, Chas. T. Main, Inc.; Louis P. Shannon, (L.) public relations department, DuPont; and Clarence L. Jordan, vice president of Franklin Institute, Philadelphia. Lower photo shows group examining Monophoto exhibit at the meeting. Felton Colwell, president of the Colwell Press, was reelected president of R. & E. Council at the conclusion of the meeting in Philadelphia.



Reports from Committees

Thursday morning with welcoming talks by Mr. Colwell, Samuel F. Chernoble, president of Comet Press and general chairman of the meeting, and Clarence L. Jordan, vice president of the Franklin Institute, Philadelphia.

Keynote address was delivered by Louis P. Shannon, of the public relations department of DuPont, who talked about the value of research, and recounted some of the long periods of frustration and heavy financial outlay before DuPont research paid off with Nylon, Dacron, Cronar and other products.

"Research pays, but you never know when," he observed. Mr. Shannon said the purpose of research is the same for graphic arts as it is for any industry: to make more of a product at a lower cost so that more people can enjoy it.

"The simplest research is just to look at a situation critically, and ask yourself why each step in the operation is performed. Very often suggestions will be forthcoming that can make the operation more efficient."

He went on to describe the more complex methods of pure research, and said that his company spends about three cents on each sales dollar for research. "It took 11 years and 27 million dollars to develop Nylon," he recalled.

Mr. Holliday opened the afternoon session with his survey of research developments, as reported in a questionnaire he sent out to a number

of suppliers and research organizations.

Committee Reports

This was followed by individual reports of the five main R. & E. committees, as follows:

1. *Composition*, Mr. Holliday: working on copy markup standardization, key stroke analysis and standardization of type high.

2. *Photomechanical and Platemaking*, Marvin Rogers, R. R. Donnelley & Sons: studying flexible printing plates, need for larger screens, constant light source for color separation and other aspects of color reproduction. In offset, emphasis is on ingredients of the fountain solution, bi-metal plates and a deep-etch process not affected by temperature and humidity. "We've got to give a man a cook book, not a text book if we want him to apply the results of research."

3. *Binding and Finishing*, E. J. Triebe, Kingsport Press: Sixteen projects are in work, including studies of ink, paper, binding, stitching, high-speed folding and trimming.

4. *Printing*, William C. Walker, West Virginia Pulp and Paper Co.: studying moire patterns in multi-color printing, printability, print quality, printing pressures, press control devices, faster drying inks and rollers.

5. *Engineering and Materials Handling*, Clarence M. Flint, Chas. T. Main, Inc.: Task groups working on

(Continued on Page 129)

At the R. & E. meeting, top to bottom: W. R. Spiller, Harris-Seybold; S. J. Waters; and H. M. Chestnut, both Curtis Publishing Co.; Leonard Metz, Printing Machinery Co.; Richard Kelly, Thomas W. Price Paper Co.; John L. Cousler, Rudisill & Co.; Morris Kantrowitz, GPO; Carl Sorenson, Lanston Monotype; Wm. C. Forster, Herbeck & Held; John Kronenberg, S. D. Warren; Floyd C. Larsen, Int. Assoc. Elect. & Stereo.; James E. Johnson, Tenak Products; Arnold E. Rogers, Rogers Engraving Co.



Table 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1954 AND EARLIER YEARS

Industry and census year	Establishments, number	All employees		Production workers		Value added by manufacture (\$1,000)	Cost of materials, etc. (\$1,000)	Value of shipments (Receipts) (\$1,000)
		Number	Payroll (\$1,000)	Number	Wages (\$1,000)			
Commercial printing (S.I.C. 2751):								
1954.....	12,073	200,233	888,659	157,567	650,828	1,357,820	844,511	2,202,074
1953.....	(NA)	201,697	889,721	161,898	665,229	1,392,364	785,938	2,178,302
1952.....	(NA)	204,033	860,901	161,467	640,363	1,331,366	725,068	2,056,434
1951.....	(NA)	203,019	800,717	160,433	585,440	1,239,463	707,527	1,946,990
1950.....	(NA)	195,993	717,831	157,313	539,647	1,091,190	607,171	1,698,361
1949.....	(NA)	202,138	702,248	158,419	512,702	1,054,790	558,082	1,612,872
1947.....	11,920	191,719	594,125	154,520	449,830	970,291	542,845	1,513,136
1939.....	10,295	(NA)	(NA)	112,389	158,685	381,892	225,909	607,801
Lithographing (S.I.C. 2761):								
1954.....	2,924	77,717	376,571	60,178	261,249	578,883	383,587	962,552
1953.....	(NA)	57,258	281,722	44,995	197,743	450,867	287,151	738,018
1952.....	(NA)	56,956	272,441	42,288	189,510	385,230	241,472	626,702
1951.....	(NA)	55,097	255,681	40,432	173,487	354,201	242,274	596,475
1950.....	(NA)	52,611	248,325	38,518	155,861	322,499	204,206	526,705
1947.....	1,415	52,408	192,657	41,367	127,151	314,132	174,437	488,569
1939.....	789	(NA)	(NA)	26,948	39,339	99,910	59,617	159,527
1937.....	516	(NA)	(NA)	22,533	33,952	78,513	50,731	129,244
1935.....	387	21,785	35,252	17,688	24,158	57,742	34,305	92,047
1933.....	346	17,378	23,350	14,579	18,123	42,192	25,996	68,188
1931.....	364	...	...	16,215	25,723	56,745	30,688	87,433

Lithography shows big gain in

Final Census Report for '54



FINAL tabulations on the status of the lithographic industry, as well as on commercial printing (letterpress and gravure) are contained in two booklets issued last month by the Bureau of the Census. Both booklets, Bulletin MC-27B and MC-27-A, confirm the advance forecast, as reported in this magazine several months ago, that lithography, when all the figures are totaled, has easily crossed the billion dollar mark in sales.

The rapid growth of lithography, in number of establishments, number of employees, value of shipments and value of receipts, is set forth in a number of rather complex tables. In many cases it is difficult to make comparisons between processes and between years because figures are not given in some instances and in others are combined to avoid disclosure of data for individual plants.

The accompanying tables show some of the highlights of the long-awaited report. Those desiring a more detailed analysis are advised to obtain a copy of the reports, at 20 cents each, from the U. S. Government Printing Office, Washington 25, D. C.

One interesting point is that, while small letterpress shops (1-4 employees) outnumber small offset shops by 6:1, the ratio decreases as plants increase in size to 2:1 for 50-99 employees and 1.5:1 for 500-999.★

Table 4.--SELECTED STATISTICS FOR MANUFACTURING ESTABLISHMENTS, CLASSIFIED BY EMPLOYMENT SIZE, FOR THE UNITED STATES: 1954

(Value figures in thousands of dollars. For explanation of line captions see Introduction. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other size classes. A (D) appears in the column where the figure has been omitted and the combined figure is underlined and shown in the size-class to the left)

Ind. code	Industry and item	Total, all establishments	Establishments with an average of--									
			1-4 employees	5-9 employees	10-19 employees	20-49 employees	50-99 employees	100-249 employees	250-499 employees	500-999 employees	1,000-2,499 employees	2,500 employees and over
2751	Commercial printing:											
	Number of establishments...	12,073	6,640	2,294	1,468	1,043	353	193	51	14	14	3
	Number of employees.....	200,233	15,793	16,188	20,577	32,075	24,303	30,493	17,968	9,953	<u>32,879</u>	(D)
	Value added by manufacture.	1,397,820	98,099	97,492	131,098	204,456	164,994	215,267	124,377	71,369	<u>250,703</u>	(D)
2761	Lithography:											
	Number of establishments...	2,924	1,141	512	503	413	185	127	31	11	1	...
	Number of employees.....	77,717	2,824	3,695	7,307	13,072	12,876	19,247	10,774	7,919	(D)	...
	Value added by manufacture.	378,883	20,076	26,333	52,807	95,729	99,144	145,527	81,016	<u>58,249</u>	(D)	...

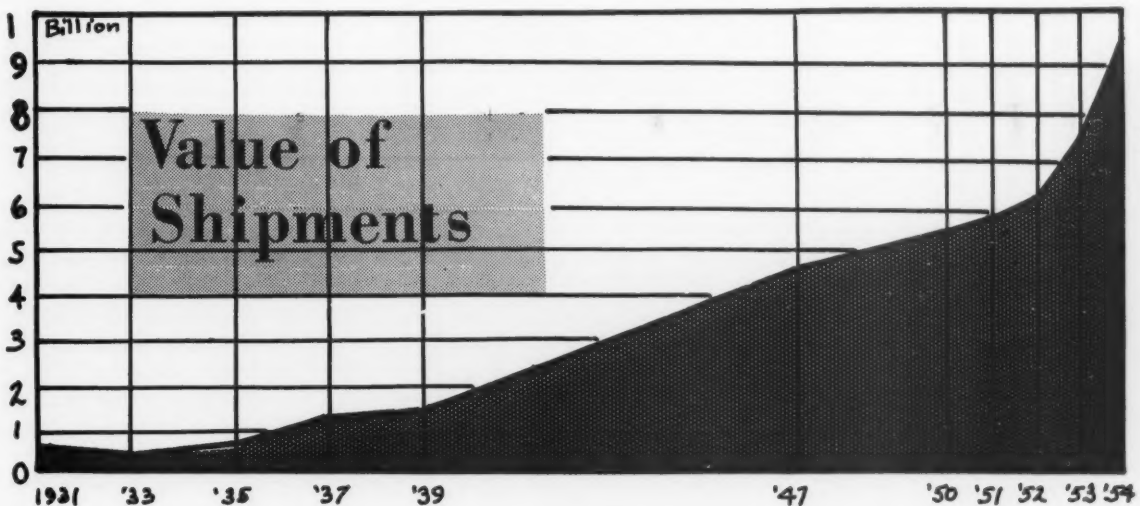
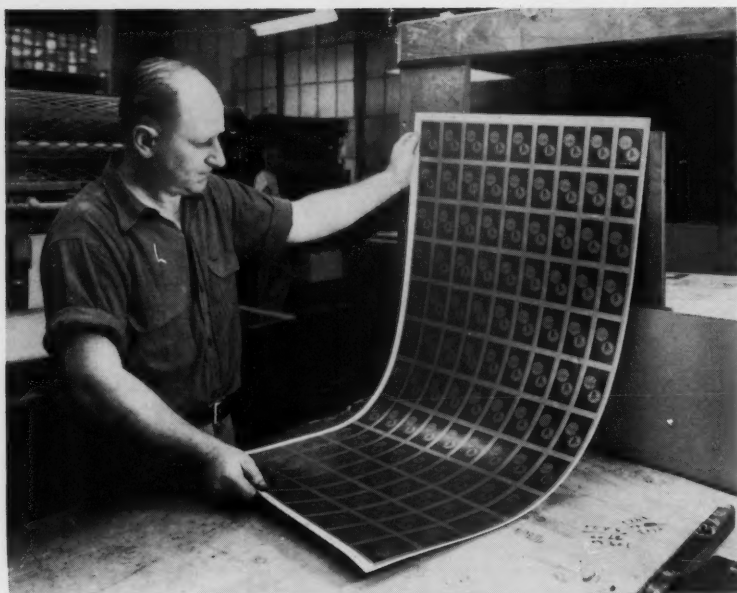


Table 6A--VALUE OF RECEIPTS REPORTED BY ALL MANUFACTURING ESTABLISHMENTS, FOR THE UNITED STATES: 1954 AND 1947

Product code	Product	Value of receipts (\$1,000)	
		1954	1947
2761---	Lithography, total.....	999,112	485,081
	Lithographic process:		
2761011	Newspaper, ready prints and shopping newspaper.....	2,481	615
2761013	Magazines and periodicals.....	34,195	8,769
2761015	Maps, atlases and globe covers.....	4,082	3,869
2761017	Cards, other than greeting cards.....	4,507	1,642
2761021	Labels and wrappers.....	93,637	72,860
	Business forms:		
2761023	Continuous forms.....	67,319	22,791
2761025	Unit-set forms.....	33,235	
2761027	Other, except blank book and loose-leaf.....	31,666	
2761031	Tickets and coupons.....	1,702	1,544
2761033	Calendars and calendar pads.....	32,222	24,502
2761035	Catalogs and directories.....	50,452	12,786
2761039	All other general commercial lithography, including advertising circulars and pamphlets.....	469,484	⁵ 298,899
	Decalcomanias:		
2761051	Letterpress process.....	⁶ 2,120	⁶ 1,419
2761053	Lithographic process.....	11,339	17,199
2761055	Silk screen process.....	11,201	1,495
2761057	Gravure process.....	(⁶)	(⁶)
2761050	Not reported by process.....	4,382	(⁵)
2761081	Lithograph plates made for others.....	40,952	16,691
2761000	Lithography, not specified by kind.....	34,506	(⁵)
2761010	Lithography, not reported by product.....	69,630	(⁵)

Footnote 5 means figures not available separately, while 6 indicates that figures have been combined to avoid disclosure. Complete tables, from which these three have been abstracted, include a number of footnotes and paragraphs of explanation which describe in detail all the categories and methods of listing.



Offset pressmen Landis Zahalka, at Western Printing & Lithographing Co., Racine, Wis., inspects a press sheet lithographed in three colors. First color down was a metallic gold solid, followed by a heavy red and a brown tint. Oxy-Dry sheet cleaner made it possible to use a heavy spray on the gold to prevent offsetting, without danger of spray residue on blanket.

SHEET CLEANERS

**Lithographers find vacuum units pay off
in quality, reduced press stops**

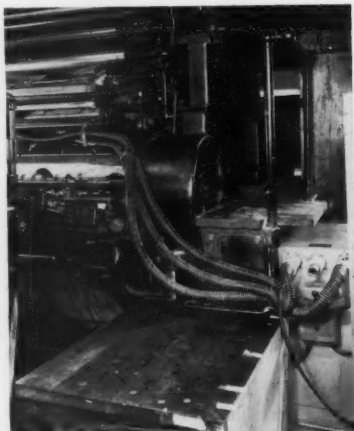
WHAT goes into the manufacture of a deck of ordinary playing cards? To say the least, a multitude of plans, designs and production operations. So much so, that the average card player might logically wonder why his bridge or poker deck does not cost more than its present retail price.

The most important reason playing cards have become an inexpensive household commodity can of course, be traced to their mass production manufacture. However, the ability to achieve mass production has been a constant challenge to American manufacturers, and its success is a tribute to their ingenuity as well as to that of their many suppliers.

One such challenge is being met by Western Printing and Lithographing Co. in its Racine, Wis. plant. In the litho department, one press,

a Harris 35 x 45" two color is assigned the specialized job of producing multi-colored playing card backs (faces are printed letterpress) for

Here's how the Oxy-Dry sheet cleaner looks when attached on offset press. Photo taken at the Western P & L plant in Racine, Wis. where it is regularly used.



bridge and children's game decks.

During an average day's production, 10,000 sheets of special playing card stock, each accommodating 108 individual cards (two ordinary decks) are run on the press. In the past, one of the chief obstacles in the maintenance of this production quota, was the fact that paper "fuzz" remaining on the stock after cutting necessitated stopping the press every 1500 to 2000 impressions to wash the blankets clean of this accumulated lint.

Spray Powder Piles Up

Since almost all bridge decks and children's game cards are designed with multi-colored backs, additional problems occurred during the second run through the press when offset spray powder, used on the first two colors down, began piling on the blankets. Heavy forms on the first two colors always seemed to be the case, requiring heavy spray and frequent wash-ups.

A situation thus existed that involved the loss of all the advantages of standardization and planning because of all too frequent press stoppage. Paper and spray powder lint had to be eliminated.

Production is reported to be running smoothly now following installation of an Oxy-Dry sheet cleaner on one of the presses. The device, operating on much the same principle as a household vacuum cleaner, has a bar type cleaner nozzle mounted just above the first frame impression cylinder which applies a constant suction over the entire width of the sheet as it passes from the delivery board. Lint and spray residue are drawn off through tubes to a tank located in the power unit at the side of the press.

So successful have been the initial results with this unit that press stops for blanket wash up have been reduced to one-eighth the former total. Average jobs have recently run for as long as three hours (at press speeds of 4000 iph) without the need for blanket washing.

When a press sheet size is varied,
(Continued on Page 129)

3-Color Direct Separation

4. Making the Separation Negatives

By John M. Lupo, Jr.

Technical Representative
Di Noc Photographic Division
Di Noc Chemical Arts, Inc.

IN the past three articles we have discussed the basic concept of color, densitometry and the masking of color transparencies. We are now at what might be considered the last point of interest to the photographer, and that is the making of the separation negatives. In order to cover this subject it will be considered in five categories: 1. Filters and their use, 2. Selection of the film, 3. Establishing basic exposures, 4. Developing techniques, and 5. Interpretation of results, together with miscellaneous considerations.

1. Filters and Their Use

Just consider for a moment the action of an oil filter in a car. You know that this piece of equipment strains or filters out the sediment or sludge caused by engine friction, and allows the oil to pass through free of these impurities.

A photographic filter acts in a similar manner, taking out certain

colors from the light and allowing others to pass through. We have previously seen that white light consists of portions of red, blue and green light. The use of a filter allows certain portions of this color to pass (transmit) through to the film, and holds back (absorbs) other colors.

From this we may say that a filter always takes away color from the light source. Because this color is taken away, the exposure has to be increased to compensate for the action of the filter. This increase of exposure is called a filter factor, and will be discussed in detail further on in this article.

Filters are used for four general purposes:

1. CORRECTION. To render a subject in monochromatic tones, such as the use of a blue filter to drop blue on ortho film.
2. CONTRAST. To accentuate contrast, such as the yellow filter used in black and white line work.
3. SEPARATION. To separate color.

4. SPECIAL PURPOSES. Such as neutral density, color compensating etc.

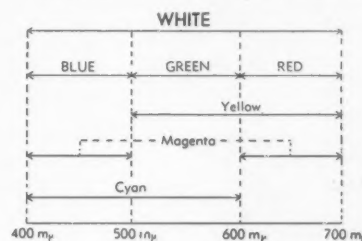
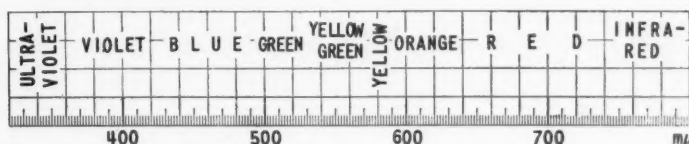
Our main interest is the separation filters and we will discuss those manufactured by Eastman Kodak Co., Gevaert Co. and Ilford Co.

Filters

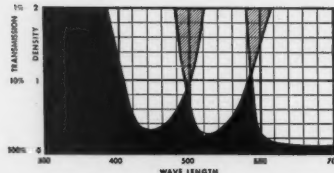
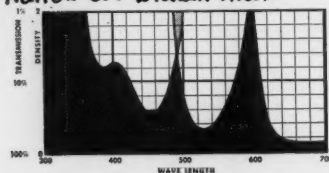
There are literally hundreds of various types and colors of filters. In order to classify each of these as to what it will do, manufacturers usually describe filters in terms of their light absorption. This information is plotted on what is referred to as absorption curves or charts. When properly understood, these charts will tell us the characteristics of light absorption of a particular filter. Before going any further into this let us con-

Figure 2. Wavelength diagram. Note the coverage of color. For example, blue from 400 to 500, green from 500 to 600 and red from 600 to 700. Notice that yellow is the combination of green and red, cyan of blue and green, and magenta of blue and red. (Courtesy Gevaert Co. of America)

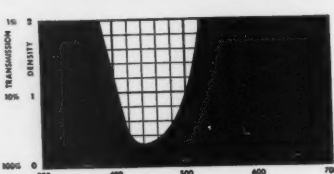
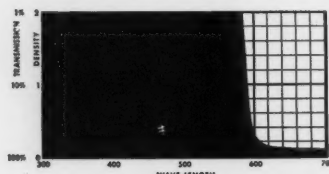
Figure 1. Wavelength chart. Portions from 400 to 700 mμ are visible to the eye; those above and below this are not. Note the color corresponding to the figure or wavelength number. (Courtesy Gevaert Co. of America)



Narrow Cut Wratten Filters

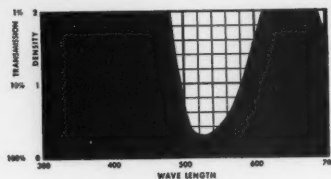


Broad Band Wratten Filters



A Filter

Cs Filter



B Filter

Figure 3-A Absorption curves of Wratten filters (Courtesy Eastman Kodak)

sider the makeup or nature of light.

Nature of Light

It is generally accepted that light is sent out as waves, something like radio waves. The length of these

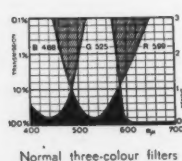
waves determines the color of light. Figure 1 is a complete chart (referred to as a spectrum chart) listing the wavelengths of visible light (from 400 to 700) and a portion of those light waves which we cannot see

(from 720 to 790 and 340 to 400). The corresponding colors for the wavelengths of light are illustrated at the top of the diagram. The numbers on this figure refer to a term called an Angstrom unit, abbreviated as μ , which is a very small unit of measure used for description of wavelengths. As you can see from the chart, blue falls within the 400 to 500 μ , green from 500 to 600 and red from 600 to 700. For color separation we are primarily interested in these three colors: blue, green and red.

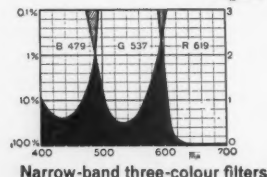
We know that to separate for yellow we use a blue filter, for red a green filter and for blue a red or magenta filter. But the \$64,000 question is WHY? This is easily explained with the use of the chart in Figure 2. As an example let us start with the blue filter negative, yellow printer. We know that this filter will allow blue light to pass through (transmit) to the film, and consequently the areas that are solid or partially blue on the transparency will show up as black (or gray, depending on the intensity of the blue on the original) on the negative. They will not print on the plate or paper.

However, the blue filter does not pass through green and red light. It

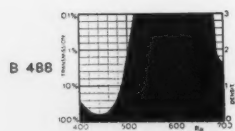
Figure 3-B (Left) Absorption curves of Gevaert filters (Courtesy Gevaert)



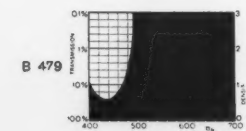
Normal three-colour filters



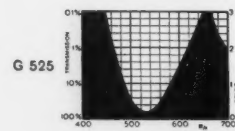
Narrow-band three-colour filters



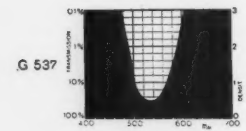
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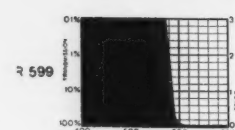
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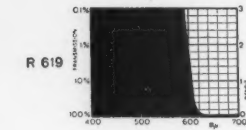
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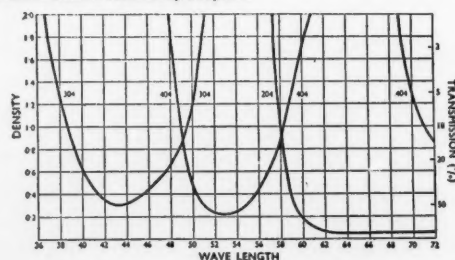
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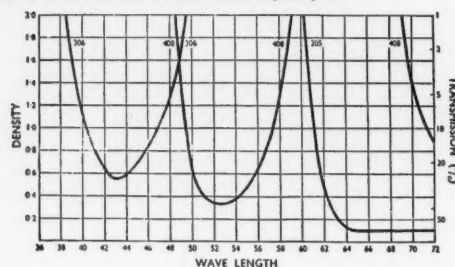
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Figure 3-C Absorption curves of Ilford filters (Courtesy Ilford)

Ilford Tricolour Filters Nos. 304, 404, 204



Ilford Narrow-cut Tricolour Filters Nos. 306, 408, 205



holds these back (absorbs) and consequently these areas will show up as white on the negative and will of course print on the plate. This combination of green and red light is yellow, as illustrated in Figure 2.

We can now see from this that by using the blue filter we transmit blue light, which shows as black on the negative, and absorb green and red (the combination of which is yellow). The latter show up as white on the negative and of course print on the plate or paper.

Action of Filters

The green filter negative, magenta printer, passes through green to the film and absorbs blue and red which make up magenta. The red filter negative, transmits red and absorbs blue and green which make up blue green or cyan. If these color combinations confuse you, refer back to Article 1, Figure 1 (March ML) for the illustration on the additive process of color.

If you are still confused continue on, for a thorough understanding of these color combinations is not mandatory. As we continue, some of the haziness on this subject may be cleared up. The one important point to remember is this: *a filter is selective; it holds back (absorbs) certain colors and passes through (transmits) other colors. When you change the color or intensity of the filter you will get different results.*

Figure 5. One of the matrix type punch units. This one is manufactured by Durst of Italy and distributed by Hanimex Inc., New York. It is used for accurate register of transparencies, masks, separation negatives, etc. Figure 6. (right) Vacuum base board with recessed register plugs (Hanimex) coinciding with

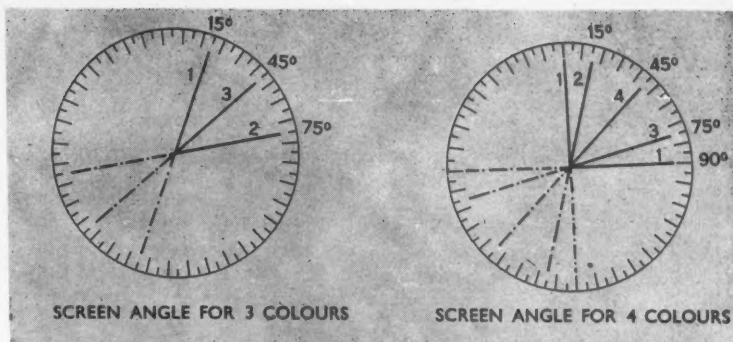
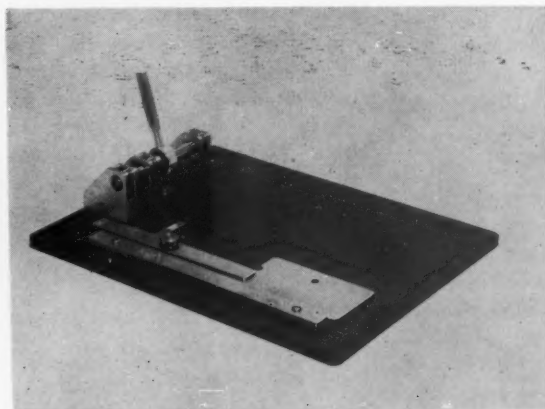


Figure 4. Screen angle chart. Screen angles for three- and four-color printing. No. 1—yellow; No. 2—red or magenta; No. 3—blue or cyan; and No. 4—black. (Courtesy Gevaert Co. of America)

Now back to the absorption curves we mentioned earlier.

Absorption Curves

Filters for use on separations are referred to as narrow and broad cut types. The difference between these types is best illustrated in the series of charts in Figure 3. You can see from these illustrations that the narrow band filters do not overlap to any degree. This overlapping will of course cause contamination in the separation, and consequently the separations will have to be corrected by an artist.

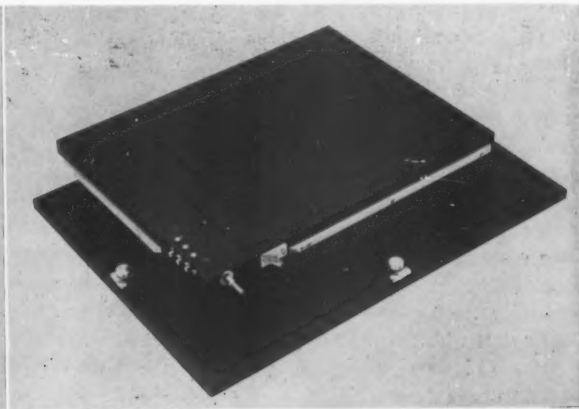
The broad cut filters overlap considerably and it is this overlapping that allows the dot etcher latitude in correcting on indirect separations. The narrow band filters usually are used for direct separations on transparencies and originals, the broad band filters for indirect.

To understand these absorption charts, consider that the white areas on the chart mean the amount of light being transmitted and the black areas are those being held back. The percentage figures on these charts refer to the transmission of light in percentage, (100 percent meaning that all light goes through, and .1 percent meaning a very small amount of light passes through) and the smaller figures (0 to 3) refer to the density. The bottom figures are Angstrom units which we mentioned before. Check these numbers, or Angstrom units, to the chart in Figure 1, to find the corresponding color name.

2. Selection of Film

In direct separation high contrast pan film is used. The important point in its selection is consideration of the base stability (for good register) and

the matrix type punch in Figure 5. In using this the film is registered to the base of the plugs. A vacuum is applied to the base, the plugs are withdrawn into the baseboard, and the gray screen is placed over the film.



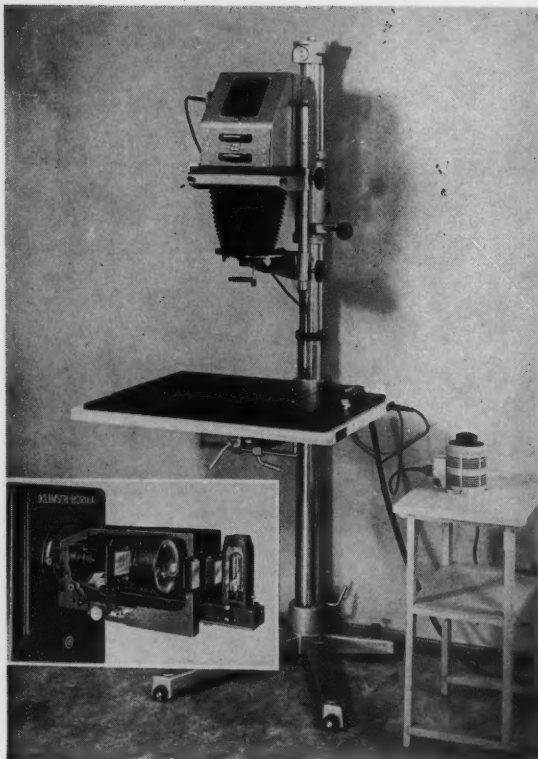


Figure 7. (Inset) Klimsch Reprocolor. This is the attachment for standard process cameras which adapts them to direct separation work on small transparencies. Note the projection bulb, condensers and transparency holder. Manufactured by Klimsch and distributed by Reprographic Machines Inc., New York. **Figure 8.** (large photo) Hanimex Laboratory Model TCP color enlarger, designed for three-color direct separations. It can accommodate transparencies up to 5 x 7", using the matrix register system illustrated in Figures 5 and 6 in addition to a similar register matrix device on the transparency, assuring perfect mechanical register throughout the entire separation process.

correct emulsion characteristics. You can refer to the first article (March ML) of this series where we have listed the brand names and descriptions of this category for use in your selection.

3. Establishing Basic Exposures

In order to establish the exposure times for tricolor filters, manufacturers usually consider the red filter to have a filter factor of 1. With filters used on black and white, a filter with a factor of 1 would mean that you multiply the normal exposure by 1 to get the correct exposure for that filter.

This, however is not the case with the red filter for color. This factor of 1 for the red filter is an arbitrary number used to determine the factors of the other filters in relation to the red. In order to determine the exposure for the various filters, you have to start with the red filter and, by trial and error, establish the proper exposure time.

When you have the proper exposure time for the red filter, you can refer to the filter factor furnished by the manufacturer for the factors of the green and blue filters, and multiply the red filter exposure by the factor for the green and blue filters. A recommended test for establishing proper exposure times will be discussed in detail later in the article.

4. Developing Technique

For working with pan film, it is rather difficult to try to establish a procedure for each individual, as each person, after working a set of separations, will find out the problems of working in complete darkness and develop his own technique. As a starting suggestion, keep your darkroom neat, clean and orderly. It might also be advisable to go through a rehearsal on your own before turning out the lights. The idea of a dress rehearsal may sound silly but it may

save you from a lot of embarrassing situations when the lights are off.

As to the use of a specific developer, I would suggest that you try at least two of the commercially packaged lith type developers, and select that which gives you the best results and working qualities. The development of the separations should be done at one time and if possible in one tray. This may be difficult when working with large size films, but can be easily done in sizes of 8 x 10" or less.

The important point of this developing procedure is that it should be standardized. Temperature should be exact, at 68 degrees F., agitation consistent and fresh developer used for each negative. The developing time should be two minutes and fifteen seconds to three minutes. Underdevelopment will show open highlights, and no detail, while overdevelopment will fog highlights and show detail dots too large.

5. Interpretation of Results

In making the separations, you should include a film gray and a transparency color chart, both of which can be used to interpret the balance of the separation negatives. After development, compare these gray scales on each of the separations, for dot value in the highlights, middletones, and detail steps. If you notice any serious differences, they should be corrected if possible by tray etching with Farmers Reducer or the negative (or set) will have to be remade. Interpretation of the transparency color chart will show the effect of the mask on the transparency and also indicate the purity of the separation.

Another important point is the ability to interpret the dot value on the negative in relation to the color value of the original. This is thought of by many as the sixth sense of a good color photographer. However it is not an inborn sense, but one that comes from experience in studying results of your separations, and comparing them with the finished printed sheet. Try to analyze a transparency when examining it, to determine the dot values you think will be required

Kodak Autopositive Film



takes the pressure off your busy darkroom

Because you can handle this unusual film in ordinary (tungsten) room light, you can work out in the gallery or in a spare room. Your darkrooms are free for other jobs.

But Kodak Autopositive is much more than a room-light film.

You can use Autopositive to make negatives from negatives, positives from positives... make lateral rever-

sals... duplicate negatives or positives in one step... make reflex copies of drawings, printed matter, etc... or superimpose solid, clear, or tint lettering on halftones.

In short, you can combine a variety of elements on a *single* piece of Autopositive standard film base, .005-inch PB base, or an Autopositive Plate, by making multiple exposures in step-

and-repeat sequence.

All this is possible because (1) *yellow light removes density* and (2) *white light adds density*. You add density by exposing Autopositive directly to high intensity white (arc) light. To remove density you make the exposure through a yellow filter. The degree of density—removal or addition—can be controlled by length of exposure.



You can do all these things with Autopositive—no darkroom needed:

1. Make lateral reversals without stripping or using a prism.
2. Duplicate negatives or positives in one step by contact printing.
3. Make negative and positive images on the same piece of material to simplify photo composition and combinations.
4. Eliminate double printing in photo composition.
5. Improve dot quality in four-color process work by contact printing negatives.
6. Simplify color process stripping by using Autopositive in blue-key register.

This entire page—halftone negatives and positives, lettering over halftone, line art and body text—was composed on a single sheet of Autopositive Film.

Text for this advertisement was set photographically.

Graphic Reproduction
Sales Division

EASTMAN KODAK COMPANY
Rochester 4, N. Y.

Kodak
TRADE MARK

to give you the key or dominant colors. Remember, to get this sixth sense of color interpretation you have to:

1. *Analyze* the original
2. *Study* the separation negatives
3. *Compare* the finished print with the original and the separation negatives

Now that we have covered the basic considerations of making the separations, there are a number of important miscellaneous points.

The Halftone Screen

There are two types of screens used for direct separations, the glass cross lined, and the neutral gray (film type) screen. The glass screen is not used to any extent for direct separations, because it requires relatively long exposures. The neutral gray screen, however, is characterized by shorter exposures and good contrast control. It is widely used for direct separations.

The neutral gray screens are made with a wide range of rulings, the most common for litho work being the 133 line. They can also be obtained as a set of angled screens from Caprock Developments, New York, and the Neuter Screen Co. of Conn. These angled screens eliminate the angling of copy or screen when shooting the separation negatives. The angled screen can also be made by cutting the conventional 45 degree angle screen according to the instructions furnished with the Kodak booklet "Kodak Gray Contact Screen".

As a rule, the general contrast range of the gray screen for direct separations is not very wide and consequently the practice of fog flashing is used to quite an extent. In this procedure, the normal exposure is given, followed by a flash exposure, and the screen then removed and flashed to plain white light, for about one fourth the time of the regular flash exposure. The advantage of this fog exposure is that it will increase highlight detail considerably and still not affect the dot value of the middle or detail tones.

Screen Angles

With straight black and white halftone work, the problem of screen angle is almost nonexistent. However,

with color printing the proper angling of the screen plays an important part for pleasing results. To eliminate the moire pattern the halftone dots are separated by an angle of 30 degrees, for three-color printing. When printing in four colors, the yellow is separated by only 15 degrees from the blue. *Figure 4* illustrates the three and four color screen angles.

Register

The basic philosophy of three-color separation is economy by standard-

Reprints

Reprints of Mr. Lupo's five-part series, to be concluded next month with the final section and a three-color illustration and resume of the process, will be available in August. Price will be \$1.00 for the complete booklet. Reserve your copy now by writing the editor at Box 31, Caldwell, N. J. (Numerous orders already received at the previously quoted price of 75 cents will be honored at that price.)

ization. When we speak of color we immediately think of the problem of register. In three color this is solved by the use of various types of mechanical register devices. In *Figure 5* a matrix punch is used to punch the transparency, film used for the separation negatives, and even for the stripping flat and the plate and press. In *Figure 6* the recessed plugs fit into these punched holes of the film, positioning it in exact register for each color. These devices are manufactured by Durst of Italy and are distributed in this country by Hanimex U.S.A., N. Y. Other register systems such as the Carlson Register Device, the By Chrome Punch and Repeat system the Kodak Matrix Film Punch, and numerous peg register pins also are satisfactory and can be adapted to the three color procedure. To completely eliminate your problem of register you will have to make allowance for the following:

1. Punching of masks and transparencies.

2. Punching of separation films.
3. Peg system for registering stripped up flats.
4. Punch system for flats to plates.
5. Lugs in plate cylinder corresponding to holes in plates for ease of register on press.

With this system established, register is completely mechanical, allowing little if any room for human errors.

Light Source

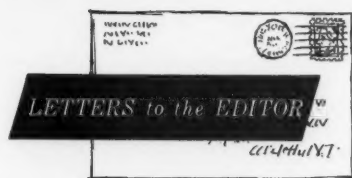
In direct separations, the light source must have sufficient intensity to go through the masked transparency, to the lens, to the halftone screen to register highlights acceptably. On conventional process cameras, four 35 amp carbon arc lamps are the minimum for this illumination. With only four arcs, enlargements of a large percentage will mean long exposures on the blue filter negative. Short exposures are necessary to prevent damage of the transparency by heat and also to reduce the possibility of shrinking the mask and transparency caused by excessive heat during exposure.

To overcome this problem of light source on process cameras, there are attachments such as the Klimsch Reprocolor, shown in *Figure 7*, which can be used for direct separations. This attachment consists essentially of a pinpoint light source, a condenser element, for equal distribution and a transparency holder. As an illustration of the details for use of this instrument, following are the data for a blue filter negative, yellow printer, that was made with the Reprocolor:

Light source:	250 watt projection lamp
Copy material:	Transparency
Density range:	.4 to 2.6, Range 2.2
Film used:	High contrast pan
Screen:	Neutral gray
Filter:	Blue No. 47 Wratten
Camera setting:	7x enlargement
Lens aperture:	f:22
Exposure time:	11 minutes
Developing time:	3 mins. at 68 degrees F

All cameras designed specifically for three color contain an efficient light optical system, giving sufficient light, through a high intensity projection bulb, to a special condenser

(Continued on Page 139)



Thanks from NALC

Dear Sir:

I want to thank you for your wonderful cooperation with the National Association of Litho Clubs in the past year. The fine cooperation that you have given our local clubs, and the help you have given the National by your publication of ads, has been very helpful to our program this year. I hope that in the future we can continue our harmonious relations, and by our concerted effort, help the industry in which both your magazine and the NALC are vitally interested.

The continued success of the NALC is vital to the growth of our ever growing industry. The members of the NALC are well aware of their responsibility to this fast growing industry, and are constantly striving to find means to enhance the educational features of our local clubs.

On behalf of all the officers and members of the NALC, I want to thank you

for all that you have done to make this year a successful one in the history of the NALC.

R. Walter Blattenberger
President,
NALC

Interested in Color

Dear Sir:

Enclosed is my check for a subscription to your very worthwhile magazine. I should have done it before. . .

With the tremendous strides in four color process reproduction that are being taken by the color giants in the lithographic industry, it becomes a problem to stay abreast of the current color correction methods. Your magazine has been publishing an increasing volume of interesting articles on color and I can no longer afford to be without it.

I have spent 25 years developing a working method of color reproduction which is effective within 10 percent accuracy limits. From my observation of general comments in the field, it appears that the percentage will have to be refined to five percent or less. So, keep the color articles coming and those of us in the field will all profit by the mutual exchange of ideas and refinements.

James M. Nolan
Indianapolis

New Graining Method

Dear Sir:

We have heard from friends that there is a new method in the U.S. as regards graining offset plates. We should be interested to get further information about this method, and which firm is dealing with it.

As you perhaps know, there is a man in Sweden named Lindmark, who has developed a method called "System Lindmark," which is working with compressed air and sand.

Helge Pehrsson

AB Maskinaffären Pehrsson & Co.,
Stockholm, Sweden

Your friends no doubt had in mind the "Uniplate," manufactured by Harold M. Pitman Co., 515 Secaucus Rd., Secaucus, N.J., U.S.A. It is a sand-blast grained plate and the manufacturer states that it has a fine, deep grain which is consistent from plate to plate, as well as in all areas of the same plate.—Editor.

Handling Paper

Dear Sir:

May we have your permission to print in a small brochure, containing other information regarding the use of Bristols for offset, the article which appeared in last October's issue of *Modern Lithography* entitled "Handling Paper in Your Plant" by Robert F. Reed of the Lithographic Technical Foundation?

We would, of course, be glad to indicate that this was being reprinted through the courtesy of *Modern Lithography*.

R. H. Campbell

Linton Brothers & Co.
Fitchburg, Mass.

Permission is gladly granted—Editor

Press Sheet Inspection

Dear Sir:

Would you send me a tear sheet on the article you published several years ago on the subject of "Press Sheet Inspection Light Booth or Table." Perhaps this was written by Frank Meyers of the Copifyer Corporation of Cleveland who, with the aid of the General Electric Lamp Works in Cleveland, developed this table.

It uses colored fluorescent light tubes of the complementary color to the ink being lithographed on the press sheet.

The article gave the cost and I believe included the drawing specifications for building it in your plant.

I have a copy of General Electric Bulletin LS-127 which has E. A. Lindsay's article on "The Use of Fluorescent Lamps for Examining Color Proofs." However, it covers only the cost of the fluorescent lamps and does not have the specifications or drawings including cost of building the light inspection booth. There are also firms who are making the unit for resale. I believe they have advertised

(Continued on Page 141)



Sell Litho



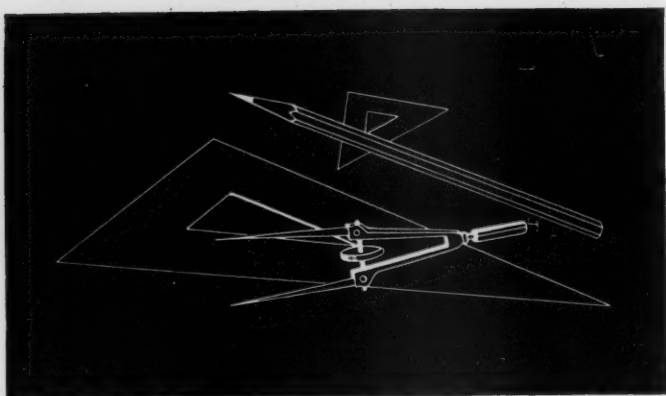
THIS CARD GOOD FOR
1 TROUT FLY
1 GOLF BALL
1 BOTTLE SUN TAN OIL
(choose check preference)

Name _____
Company _____
Address _____

AN APPROPRIATE seasonal giveaway, combined with a low-pressure letter, resulted in an excellent mailing piece last month for Consolidated Lithographing Corp., Carle Place, N. Y. The return card offers choice of a free trout fly, golf ball or bottle of sun tan oil as a vacation gift.

An accompanying letter explains that the shop will soon be closing for two weeks vacation time so customers should schedule their printing requirements to avoid inconvenience and delay. The mailing piece required three days from idea to post office. Compliments from customers attest to the success of the idea, which should help sell more litho, and could be copied by other shops.

Have you had an idea for a novel use of offset, or have you played a part in selling such a job? If so, why not share your experience with other readers in this column? If response warrants, it will be a regular feature in ML. Please send a sample or photo with your letter.



— hidden quality that spells TRUE VALUE!

Wagner equipment is designed and built to last.

The Wagner Line of precision-built ovens and coaters has plenty of muscle and staying-power, standing up under the constant pounding of heavy production schedules. It is the hidden quality that spells TRUE VALUE!

THE WAGNER LINE INCLUDES:

ROTARY-AIR OVENS
D.E.F. OVENS
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ROLLER REVOLVING MACHINES
LABORATORY COATERS
SYNCHRONIZING DRIVES
VARNISHING MACHINES
SPOT COATERS
AUTOMATIC FEEDERS
AND
OTHER SPECIALIZED EQUIPMENT

If you are planning a new installation or machine replacement, ask Wagner Engineers to go over your requirements and make recommendations. You'll get the benefit of more than sixty years' experience acquired in building better and better machinery for the Metal Decorating Industry. Give us a call, there's no obligation.

WAGNER LITHO MACHINERY

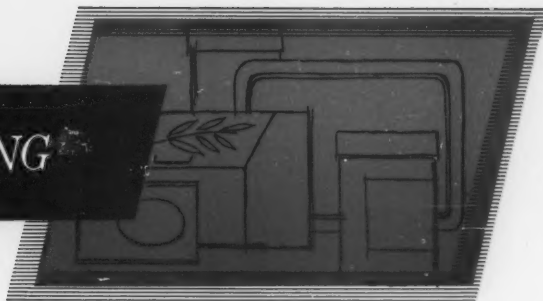
Metal Decorating Machinery

555 Lincoln Avenue, Secaucus, N. J.



Division

METAL DECORATING



American Can Perfects Wet Varnishing

By Mildred Weiler

St. Louis Correspondent

IT was an important move back in 1947 when the lithographic department of American Can Company's, St. Louis plant began working with wet varnish in the metal decorating of beer cans. Lithographed metal sheets, which pass from the press directly into the varnish and then into the drying oven, eliminate the time factor involved in the dry varnish method of oven-drying the plates first and then moving them to a coating or varnishing machine.

Raymond Scherer, superintendent

of Canco's lithographic department in St. Louis, says the company's enameling and decorating department in Chicago worked with its suppliers to find the right inks and the right varnish to do the job. In the wet varnish method, the printed sheets are not yet dry when the varnish coat is applied.

During the experimentation period one of the biggest difficulties was that the inks would bleed when the wet printed sheets were varnished. That problem was overcome and today the wet varnish method is used exclusively at American Can Company in

St. Louis and in many other metal decorating plants.

Largest Decorator

The American Can Company is the world's largest metal decorator, and the lithographic department of the St. Louis plant is one of many of the company's lithographic plants throughout the U. S. and Canada. The St. Louis plant, which also prints for the Denver and Kansas City Canco plants, turns out more than three million cans a day.

The St. Louis plant also converts the printed metal sheets into cans. The bulk of the three million a day production is beer cans, although tobacco, oil, paint, antifreeze and carbonated beverage cans also are turned out.

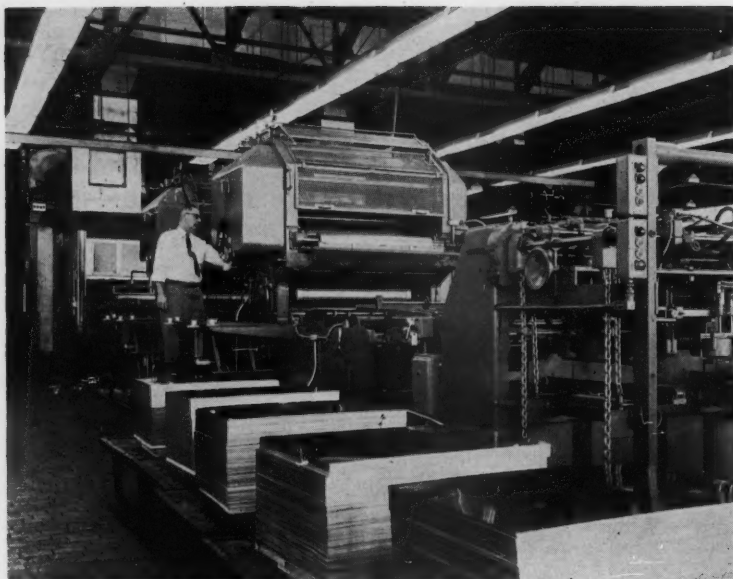
Seven Hoe tandem presses and one single Hoe, which includes a new model being installed, comprise the nucleus of St. Louis' lithography operations. The Hoe Company rates the new press at about 100 sheets per minute.

Each tandem unit consists of two single color Hoes set up one behind the other. There are two in a unit, followed by the varnish and the drying oven at the end of the line. With the tandem method, there is a time and cost advantage, as well as another advantage—ability to do overprinting.

A switch to tri-metal plates has not only improved quality, according to Mr. Scherer, but has increased im-



Wet - varnished sheets leave Hoe press and go into the oven, St. Louis plant of Canco.



Sheets lie stacked alongside new Hoe tandem metal decorating press at the American Can Co. plant. Feeder in foreground is a Dexter.

pressions per plate substantially. With tri-metal plates, which are used exclusively, the shop has run as high as 1,300,000 impressions from one plate. Prior to that, when the company used zinc plates, it obtained about 40,000 sheets from a plate.

Use Tri-Metal Plates

With the use of the tri-metallic plates, improving lithographic materials and equipment, Canco has been able to reduce the number of passes required to obtain the desired label. One example, which was pioneered by the decorating and engraving departments, and the St. Louis factory, was a presentation to Falstaff Brewing Corp., of a four-print job, which was a satisfactory facsimile replacing the

seven-print label used previously. The elimination of prints resulted in substantial savings to Falstaff.

Canco also has worked with other customers to reproduce satisfactory labels that through use of tandem presses can be produced with only a limited number of printing passes, thereby providing a more economical, yet equally attractive container.

The St. Louis plant prints about 3500 sheets an hour but averages 6900 impressions an hour for the year because it prints two colors at one time. All the plates for the St. Louis plant are made at Canco's central division engraving department in Chicago. The St. Louis plant is now in its 10th year of operation at 3200 S. Kingshighway. It has its own in-

spection laboratory and machine shop where rigid quality control is maintained with varnishes and inks. An Epon type undercoating and a top coat of vinyl are used on the inside of the cans to protect beer from direct contact with the metal.

Coiled Steel Plates

As part of a nationwide \$27 million program, described as a first step in combating rising tinplate and steelplate prices, the plant began installation of new facilities for processing of coiled steelplate in February.

This will, according to the St. Louis management, eliminate the use of pre-cut sheets to a major extent. Steelplate processed in St. Louis will serve the company's food, beverage and non-food customers throughout a large area of the Midwest. The company will install extensive new equipment and plant facilities at various other points in the United States to process tinplate and steelplate from continuous strips.

An 85,000 square foot warehouse adjoins the printing and can manufacturing divisions in St. Louis. Railroad freight cars come directly under the roof at the rear of the building. Conveyors carry the finished cans in individual cartons.

Canco has been lithographing on tinplate in multi-colors since its organization 56 years ago. In all its lithographing plants it decorates containers for hundreds of products, ranging from fruit juice and coffee to tennis balls and blood plasma. In St. Louis, however, where beer is king, beer cans understandably are in the lead.★

Ullman in New Inland Post

Inland Steel Container Co., Chicago, recently appointed Frederick E. Ullman to the newly created position of general manager of engineering. The firm is a division of Inland Steel Co.

PIP Increases Membership

Printing Industry of Pittsburgh, Inc. has almost doubled its active membership as a result of its recent campaign. Arthur H. Gratz, of Herb-

ick & Held Printing Co., president of the organization, said the drive had brought in 26 new active members. PIP previously had 30 active members and 21 associate members in the graphic arts field. The new members include printers, publishers, lithographers, typographers, binders and direct mail duplicating houses with an annual volume of \$7,500,000.

Litho Plant for Phoenix

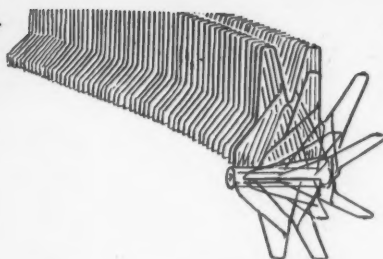
Sale of a tract of land that will bring a new printing firm to

Phoenix, Arizona was disclosed May 4th. Rocky Mountain Bank Note Co. of Arizona, a division of the Rocky Mountain Bank Note Co., Denver, purchased a parcel of land on 22nd Avenue near Grand for erection of a printing plant.

Rocky Mountain Bank Note is one of the largest printers of bank stationery, checks and other lithographed items in the entire West. It has branches in El Paso, Salt Lake City, and Ogden, Utah.

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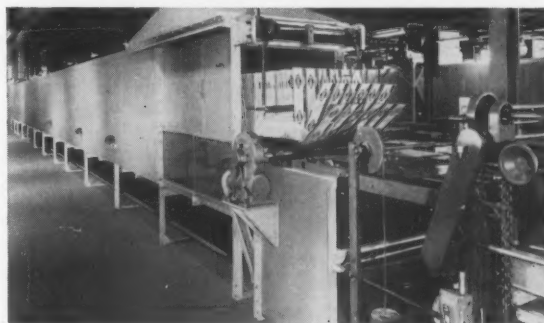
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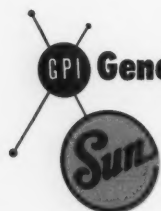
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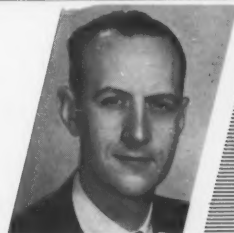
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PHOTOGRAPHIC CLINIC

By Herbert P. Paschel
Graphic Arts Consultant



Placement of Safelights

Q: What is the best arrangement of safelights in a darkroom?

J. K. L., MIAMI

A: An approved safelight should be placed over each working area such as developing tray, loading and cutting table etc. Here the strength and color of light must be such as to provide the maximum fog-free working time. For general room illumination, one or more indirect safelights suspended from the ceiling are desirable. Standard fixtures are available in the tungsten bulb and filter type as well as neon tubing.

If you want to experiment, you can devise your own indirect safelights using standard fluorescent fixtures. For slow line and halftone films, red fluorescent tubes covered with red plastic sleeves have been found satisfactory.

Shooting Combinations

Q: We are having trouble with tape marks and work spread when we strip halftone into line negatives. What is a good method for shooting combination line and halftone negatives directly?

P. A. S., CHICAGO

A: There are several methods open to you. One is to shoot the halftones in advance and make contact photographs. These are then pasted into position on the line copy. The composite is then photographed as straight line copy. The original halftones, of course, must have a tone scale suitable for a print that will pick-up correctly. A screen pick-up generally

It is impossible for Mr. Paschel to give personal replies by mail, but all questions will be answered in this column as soon after receipt as possible. The columnist also is available to the trade as a consultant for more complex litho problems.

will gain contrast so the print should be slightly less contrasty than normal.

Another system involves the use of masks. A mask is prepared which covers all of the film except the area occupied by the halftone. With this mask in place over the film the halftone exposure is made. A mask covering the exposed halftone area replaces the first mask and the line exposure which was made. This involves accurate registration of masks and film as well as line and halftone images.

An alternate technique involves masking the copy with black paper. This was outlined in detail in *Graphic Arts Progress*, Vol. 3, No. 6, 1956, The last two methods are critical in respect to registration and exposure. Unless the line and halftone exposures are matched to develop fully in the same developing time, either negative may be unsatisfactory. In view of this, you might find stripping line and halftone negatives onto separate flats easier and safer. With register marks cut into the two flats the line and halftone images can be combined in platemaking by surprinting.

Wetting Agents

Q: Of what value is a wetting agent in the development of halftones or

tints? I personally fail to find any advantage.

S. R., FAR ROCKAWAY, N.Y.

A: A wetting agent in the processing solutions provides many advantages. In the developer, it will promote more uniform development with the elimination of pinholes caused by air bubbles and elimination of dust particles and streaks caused by improper agitation. A dilute solution used as a rinse just prior to drying will prevent a variety of drying spots. Of course, if you have never experienced any of these troubles, the use of a wetting agent would not offer you any visible improvement in your negatives.

Shift in Image

Q: At same size I can make the horizontal center line of the copyboard coincide with the center line on the ground glass. When I enlarge or reduce, however, a shift takes place and the image is generally lower than at same size. What camera defect could cause this condition?

H. H., PHILADELPHIA

A: A number of defects, individually or collectively, could be the cause of your problem. If the main bed is not perfectly level, this could cause a shift in the optical axis as you change the focus. Also associated with a distorted main bed, worn bearing surfaces, etc., is the tilting of the copyboard or lensboard, or both, at various positions.

A remote possibility is some defect in the lens displacement mechanism (image centering control) causing the lens to be raised or lowered slightly at different settings. It appears very probable that the main

(Continued on Page 137)



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CONDENSED STATEMENT DECEMBER 31, 1956

ASSETS

Cash	\$241,824.69
On deposit with Bankers Trust Company, et al (Cash in office \$50.00)	
U. S. Govt. Bonds (1,861,310.34)	
U. S. Govt. Guar. PHA Bonds (Tax exempt) (1,366,510.68)	3,227,821.02
U. S. Bonds equal 69.90% of market values of all invested assets	
State, Municipal Bonds (Tax exempt)	437,959.90
Miscellaneous Bonds	199,609.82
Rails, Utilities and Industrials	
Stocks	729,200.00
High grade Preferred and Common issues.	
Mortgages	22,955.89
Premiums in Course of Collection	217,795.37
Due the company on policies, excluding any premiums on policies more than ninety days old.	
Deposit in Mutal Corporations	
Reinsurance Fund	58,818.40
Pool with other mutual companies for loss in one accident in excess of \$30,000.00 and excess over \$100,000.00 to \$5,000,000.00 further reinsured.	
Interest Accrued, Etc.	47,550.47
Interest earned; Reinsurance recoverable; Cash Surrender Value—Life Policy.	
TOTAL ADMITTED ASSETS	\$5,183,535.56

LIABILITIES

Loss Reserve and Loss Expense ..	\$2,435,841.47
As required by law to meet future payments due or to become due on all claims to date of this statement.	
State Workmen's Compensation Board Expense	146,506.00
Estimated amount hereafter payable to N. Y. State Workmen's Compensation Board for expenses of administering the Law.	
Unearned Premium Reserve	546,325.61
Pro rata portion of premiums unearned on policies which have not expired.	
Other Liabilities	57,954.10
Salaries, Taxes, etc., due but unpaid as of date of this statement.	
Dividend Reserve	116,670.20
To meet future payments of dividends declared on policies expiring up to March 1957.	
TOTAL LIABILITIES	\$3,303,297.38
Voluntary Special Reserves	
For Compensation Losses in excess of \$10,000 and less than \$30,000; and Disability Epidemic Reserve	29,414.27
Dividends undeclared on Earned Premiums of unexpired policies..	79,156.71
To adjust all Stocks and Bonds other than Government Bonds to the lower of cost or market	268,454.78
†SURPLUS	1,503,212.42
TOTAL	\$5,183,535.56

BONDS AND STOCKS valued on New York Insurance Department Convention value basis.

\$275,000 Government Bonds included above deposited with the State of New York as required by law.

†Policyholders Surplus would have been \$1,880,238.18 with Special and Voluntary Reserves included, New York Insurance Department Basis

to produce
sharper, cleaner
halftones
economically
... use



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READERS:

Are you taking full advantage of your lithographic magazine?

THE staff of *Modern Lithography* has been trying, in several important ways, to make the pages of your magazine more valuable to you. Increased in-person coverage of litho club and trade association meetings has been one way. Interpretative articles on subjects of vital interest to you is another. That's the reason for our recent series on presensitized plates, three-color direct separation, and visits to typical litho shops and for our expanded coverage of the litho news in all parts of the United States and foreign countries.

Our climbing circulation figures indicate your appreciation of our efforts. But are you taking *full* advantage of your lithographic magazine? In past months, many of you have availed yourselves of the services of our two regular columnists, *Theodore C. Makarius* (Press Clinic) and *Herbert P. Paschel* (Photographic Clinic). The purpose of this page is to remind you that if you have a troublesome problem regarding press or camera, these specialists are ready to help you solve it. If you are a subscriber to *ML* and have a question, why not jot it down on the coupon below and send it along to us? We'll be glad to help you, and the service is free.

MODERN LITHOGRAPHY
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☐ Mr. Makarius
(Press)

☐ Mr. Paschel
(Photography)

My Question: _____

(Questions will not be answered by mail, but in an early issue of *Modern Lithography*)

(Only your initials will be used)

Name

Company

Address

TECHNICAL SECTION



Evaluation of Process Inks

By Frank M. Preucil

Supervisor, Photographic Division,
Lithographic Technical Foundation

AN evaluation of process inks tells the range of colors that any set of process inks can produce, and the amount of color correction they will require. The evaluation can be made from simple calculations. The calculations are based on reflection densitometer readings of the individual solid colors, using a filter over the densitometer aperture.

A convenient way to get these figures is from an LTF Color Test Strip which you print on different types of color jobs in your plant. This strip is about 10½" long and ⅜" wide. It consists of 21 color blocks. The areas, from left to right are: (1) Solid yellow; (2) Solid yellow and solid magenta (producing red); (3) Solid magenta; (4) Solid magenta and solid cyan (producing blue or purple); (5) Solid cyan; (6) Solid cyan and solid yellow (producing green); (7) Solid cyan, magenta, and yellow (producing brown, dark gray, or black); (8) Solid cyan, magenta, yellow, and black (producing maximum density black); (9) Black; (10, 11, 12) Three-quarter, one-half, and one-quarter tints of yellow; (13, 14, 15) Three-quarter, half and quarter tints of magenta; (16, 17, 18) Three-quarter, half, and quarter tints of cyan; (19, 20, 21) Three-quarter, half, and quarter tints

of equal dot sizes of yellow, magenta, and cyan.

Four factors describe the most important working characteristics of a set of process inks. These are: (1) Strength; (2) Hue; (3) Grayness; and (4) Efficiency.

To make an evaluation, first make reflection density measurements of solid yellow, magenta and cyan. Measure the density of each ink with a red (A-25), green (B-58), and blue (C5-47) filter over the densitometer aperture. Make readings of colors in the same area of the sheet or from the LTF Color Test Strip. Assemble the figures in a table like the following example:

Table I

INKS	FILTERS		
	RED	GREEN	BLUE
Yellow	.02	.08	.86
Magenta	.09	.89	.33
Cyan	1.25	.40	.17

The figures in Table I were taken from an LTF Color Test Strip.

Ink Strength

To compare the strength of different inks of the same hue, you merely compare the highest of their three filter density readings. In the case of the inks in the Table I, the yellow has a density value or strength of .85, the magenta .89, and the cyan 1.25.

The strength of an ink is important because it determines the range and depth of colors that you can produce with it. For example, the relative strengths of a yellow and a cyan overlap will determine whether the green

that is produced will be a blue-green or a yellow-green.

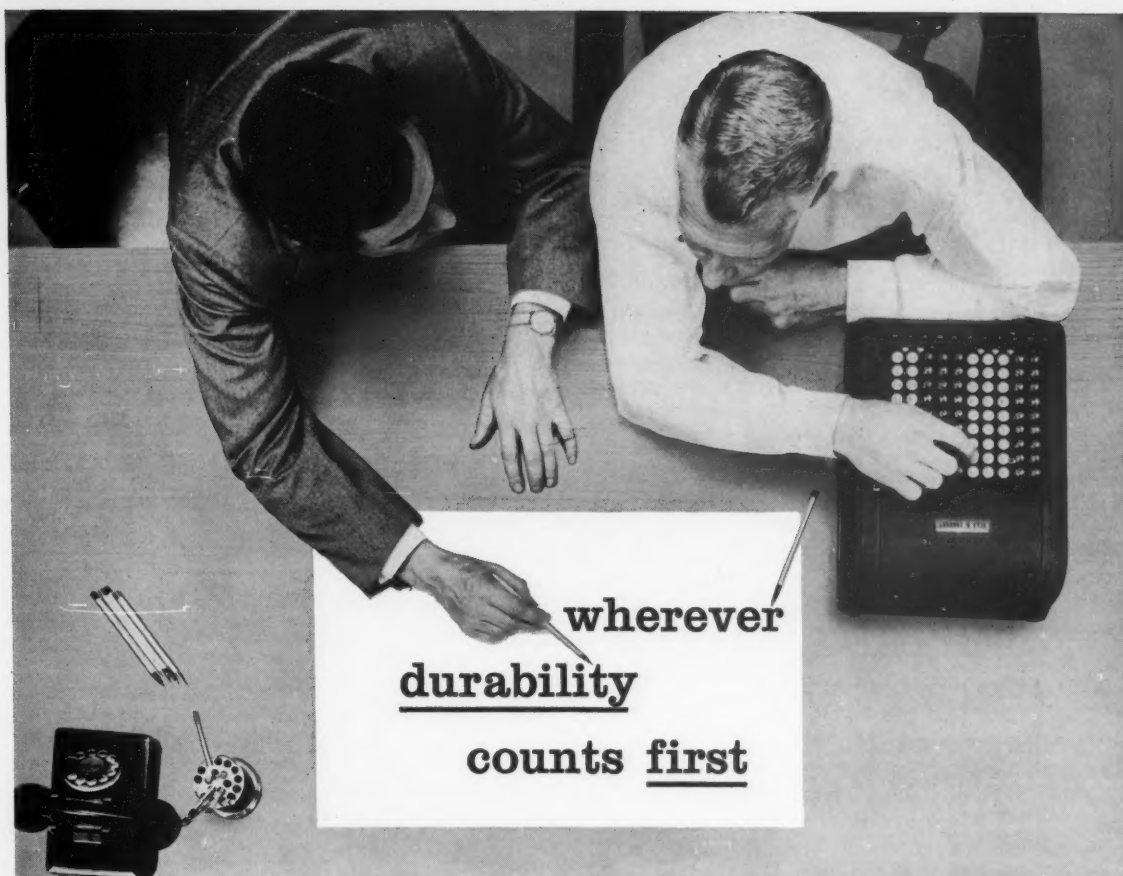
It is just as important to control the individual strengths of inks as it is to control their hues. In single-color presswork, it is especially important to measure the strength of at least the first color down. Use a densitometer to make sure it is correct for your standard printing conditions. Evaluations of the strength of the colors that follow can be made visually by checking the colors produced by overlaps. For example, if yellow is down first and has the proper strength, you can check the strength of the magenta that follows by noting the shade of red produced by a solid overlap.

Color Hue And Hue Error

The hue of a color is determined by the colors of light which it absorbs and reflects. Perfect process inks absorb one-third of the spectrum and reflect two-thirds. A perfect process magenta (process red) absorbs all green in the light and reflects all blue and red. A perfect process cyan (process blue) absorbs all red and reflects all green and blue. Likewise, a perfect process yellow absorbs all blue and reflects all red and green.

The hue error of a process color is determined by the extent to which the colors it reflects are not perfectly balanced. The ink hue number expresses this error as a percentage. A magenta with zero hue error reflects red and blue equally. If it had a 100 per cent hue error toward red,

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it would reflect red and no blue. Such a color would, in fact, be red and not magenta at all. (Some plants are using "magenta" with hue errors as high as 90 per cent.)

The hue error of a color can, therefore, be determined by measuring the amount of red, green and blue light that reflects. As an example, consider the magenta shown in Table I. This magenta had a density of .09 with the red filter, .89 with the green filter, and .33 with the blue filter. The red filter reading is the lowest of the three (L), the green filter reading is the highest of the three (H), and the blue filter reading is in-between or medium (M).

To calculate the hue error, use the following equation:

$$\text{Hue Error} = \frac{M - L}{H - L}$$

Using this equation and the figures in our example, we have:

$$\text{Hue Error} = \frac{.33 - .09}{.89 - .09} = \frac{.24}{.80} = 30\% \text{ error}$$

Grayness

The purity of a process color is judged by its freedom from gray. Colors become gray when they reflect less light of their predominant color than the paper that the color is printed on. For example, a process magenta reflects all red and blue. It becomes gray to the extent that it reflects less red than the white paper on which it is printed. The grayness of an individual color will, of course, affect the grayness of color mixtures in which it is used.

$$\text{Grayness} = \frac{L}{H}$$

In this calculation, we again use the highest density reading (H) and the lowest (L). Using the figures in the table for the magenta ink we find:

$$\text{Magenta Grayness} = \frac{.09}{.89} = 10\%$$

The lower the percentage grayness of a process color, the higher its purity.

Efficiency

In the discussion of hue, it was pointed out that a perfect process ink should absorb one-third of the spectrum and reflect two-thirds of it. How well it does this is a measure of its efficiency. A process ink's efficiency goes down in proportion to the extent it absorbs light that it should reflect.

The efficiency of a process color can be rated from the percentage ratio of its incorrect light absorption to its correct light absorption. The equation is:

$$\text{Efficiency} = 1 - \frac{L + M}{2H}$$

If we use the figures again for the magenta ink in Table I, we have:

$$\text{Efficiency} = 1 - \frac{.09 + .33}{2 \times .89} =$$

$$1 - \frac{.42}{1.78} = 1 - .24 = 76\%$$

The higher a process ink's efficiency number, the greater the range of pure colors it will produce with other process inks. Also, the higher an ink's efficiency, the less the color correction work that will be needed.

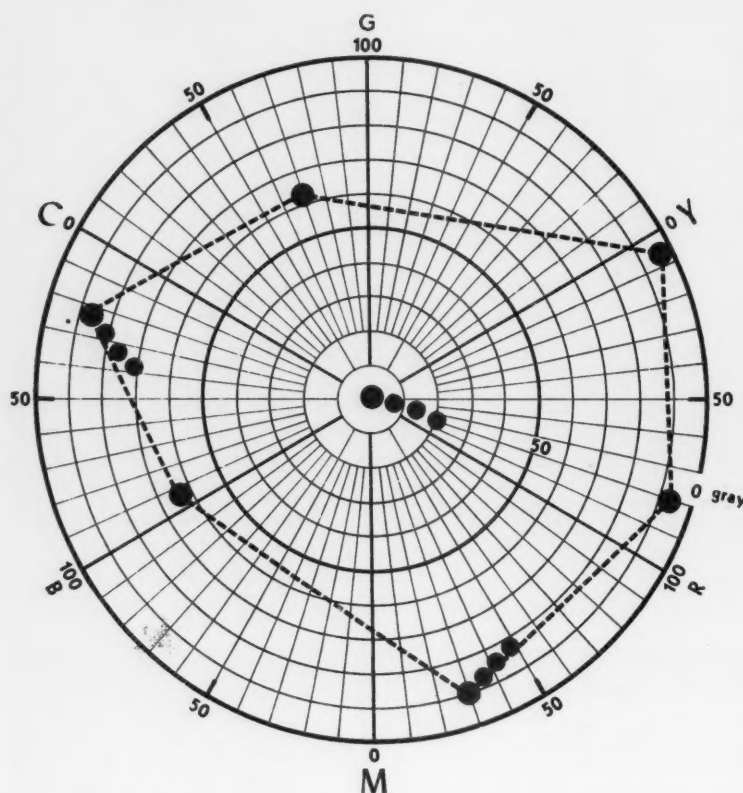
Efficiency values are perhaps the best single number to use in evaluating the color quality of a group of process inks. However, two different inks may have the same efficiency, but differ in their grayness and hue.

Recording Data

The LTF Hue and Purity Chart (see illustration) offers an easy way to visualize the hue error and grayness of a number of process inks. Letters around the circumference of the wheel show "ideal" magenta at the bottom (six o'clock), "ideal" blue (produced by the overlap of magenta and cyan) at eight o'clock, "ideal" cyan at ten o'clock, "ideal" green (produced by the overlap of cyan and yellow) at twelve o'clock, "ideal" yellow at two o'clock, and "ideal" red (produced by the overlap of yellow and magenta) at four o'clock. The

(Continued on Page 133)

LTF INK HUE AND PURITY CHART





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Printing Papers

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Photography, Tone and Color Correction

SETTING UP A STRANGE CAMERA — FOR HALFTONES. John Pinn. *The National Lithographer* 63, No. 12, December, 1956, p. 12, 13, 14 (3 pages). The author in part two of this article gives more of his ideas on setting up a camera to get the most efficient dot. The effects of variables, such as time, temperature and age of the developer in developing halftones is described. The multiple stop method of shooting halftone positives is also described.

RELIEF-PLANOGRAPHIC CONVERSION—Part II. Eldon L. Thompson. *Graphic Arts Progress* 3, No. 4, July-August, 1956, pp. 1-2 (2 pages). The double-offset method of making conversions from relief to offset plates is described. Tables show the process elements involved, cost of equipment, materials and labor time involved for the 5 conversion methods; double transfer, reproduction proof, brighttype, translucent proof, and direct image.

***PHOTOGRAPHIC REDUCERS.** *Den Grafiske Højskoles Forskningslab* pp. 7-17, No. 6, July, 1955; *Monthly Abstract Bulletin* 42, No. 3, March, 1956, p. 130. Farmer's Reducer is used on negatives and positives, but

it keeps badly, and this causes the lithographer some inconvenience. The Grafiske Højskoles Forskningslaboratorium therefore made some comparative experiments with six reducers (Farmer's, potassiumpermanganate, Belitski's, ammonium persulfate, cerisulfate, and ammonium cerinurate). If reduction in halftone work is required in areas of great density, the persulfate reducer is suitable. In areas with low density, Farmer's Reducer is appropriate. For an even reduction of the whole density range, a number of reducers are available, viz., Belitski's, potassium permanganate, ammonium cerinurate, and, finally, ammonium cerinurate plus ammonium nitrate. On screens, Farmer's Reducer remains the most suitable one, as it attacks mainly the edge of the dot.

USES OF ELECTRONICS IN GRAPHIC ARTS INDUSTRY — Part VII — Springdale Scanner RCA Color Corrector. Francis A. Westbrook. *Printing Equipment Engineer* 86, No. 11, August 1956, pp. 63, 64, 99, 100, 101, 102 (6 pages). The Springdale Scanner of Time, Incorporated and the RCA Color Corrector are illustrated and described. The typical procedure of indirect process photoengraving is reviewed with discussion of process

ink requirements and failures, and the RCA Interchemical approach to electronic correction is outlined.

HIGH-SPEED TV OFFICE DUPLICATOR. *Electronic Design* 5, No. 4, February 15, 1957, p. 5 (1 page). Original documents can be duplicated at the rate of 17,000 characters of elite type per second with a TV duplicating device developed by Stanford Research Institute, Menlo Park, California. A prototype, developed for A. B. Dick Co., prints the text from a 35 mm film on a 3/4 in. wide type. Proposed modifications will enable duplication on standard size letter paper. At the point of transmission, a spot of light 0.006 in. in diameter scans the original document. Phototubes are positioned to receive light reflected from the document as it is scanned by the light beam. The tubes emit electrons proportional to the amount of light reflected to them. At the receiver, the signal is amplified and applied to the grid of the cathode-ray tube. Whenever the transmitter strikes a dark spot, such as a portion of a language character, on a master document, the tube grid gets a greater positive electric charge. Immediately, a small dot of electric charge is deposited—by means of a wire array in the tube face-plate—on copy paper. After 1,700 successive scanings, a sufficient number of electrically charged dots is deposited on the paper to form a legible reproduction.

Planographic Printing Processes

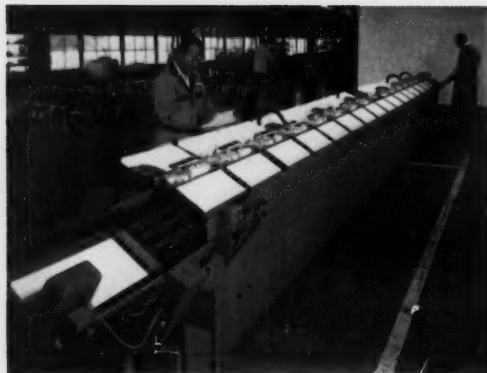
PHOTOLITHO NOTES—BIMETALLIC PLATE. J. S. Mertle. *The National Lithographer* 63, No. 12, December, 1956, p. 32 (1 page). A patent has been issued on a bimetallic printing surface and a method of producing images thereon. This plate consists of a low carbon steel (SAE 1000 series) base-plate bearing a surface of metallic chromium electrolytically deposited to a thickness of 0.00005 inch. Deep etch image is made using bichromated gum, etching with hydrochloric acid and calcium chloride and removing hardened gum with alkaline metal cleaner. Dilute solution of ortho-phosphoric acid is used to make chromium non-image areas grease repellent. Steel areas are made ink receptive by treating with a mixture (formula stated) hydrocarbon base liquid detergent, 15% solution of phosphoric acid and standard litho developing ink.

Paper and Ink

***OFFSET LITHOGRAPHY; ITS REQUIREMENTS AND MOST SUITABLE PAPERS.** Olin Freedman. *American Paper Merchant* 53, No. 11: 17-19, 70; November, 1956. *Bulletin of the Institute of Paper Chemistry* 27, No. 5, January, 1957, p. 435. Differentiations between offset lithography (I) and other printing processes include the fact that in (I) both printing and nonprinting areas are carried in the same plane, and printing is accomplished by chemical rather than physical means. The process of (I) is outlined, and the requirements of paper to accomplish the most acceptable results

(Continued on Page 131)

What's going on at HARRIS...



Gathering 1,000 sheets a minute, this 16-station Macey collator is tested before shipment to a customer in England. With just one operator, a Macey collator brings increased automation to the bindery.



Bringing "A Tale of Two Cities" to graphic life, artist Everett Henry puts finishing touches on his original painting for Harris-Seybold's 1957-58 calendar. The lithographed calendar will be ready for mailing in June.

Keeping in step with growing demand in the small job-press field, another lot of $14\frac{1}{2} \times 20\frac{1}{2}$ " Harris offset presses nears completion on the final assembly floor at Dayton. In the background, craftsmen assemble a group of Harris models 122A, 130, and 130-FR.



Demonstrating electronic trip, project engineer Dick O'Brien (right) shows how this new absence-of-sheet detector works on all stocks, including onionskin. The electronic detector is now being shipped on new $17\frac{1}{2} \times 22\frac{1}{2}$ " and 23×30 " Harris offset presses.

HARRIS-SEYBOLD COMPANY

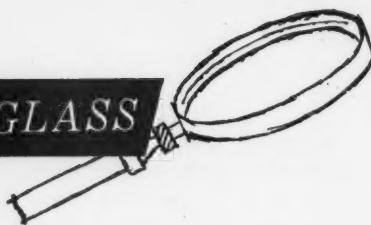
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THROUGH the GLASS



THE ambiguity of the term "offset" in the United States is no problem in England. The term is used in America to mean both litho and the unwanted transfer of an image from the front of one printed sheet to the back of another. British trade journals indicate that Britons avoid confusion by calling litho "offset," and calling the transfer of ink "set-off." Sounds like a sensible arrangement.

ML

The PIA Self-Advertising awards contest has been urging printers and lithographers to blow their own horns so that their customers can learn

guarantees of Freedom that are part of the structure of our nation. To this end we submit the original text of these guarantees. . . ."

ML

We've talked a lot about three-color offset in the columns of *Modern Lithography* for the past three years. Now comes word from Philadelphia of first use in the area of the Eastman Kodak three-color method for letterpress. A sample currently is being distributed in the city by Lincoln Photo-Engraving Co. The illustration was printed in three colors with black printer added for a type message. Plates were magnesium. The specimen we saw looked good.

ML

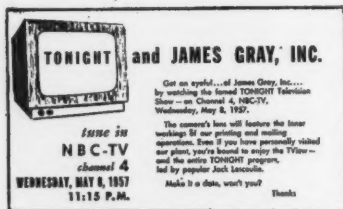
Offset was used in a very successful promotion piece a few months ago in Philadelphia at the opening of the

Sheraton Hotel. And it was Franklin Printing Co., Primos, Pa., the company founded by Ben Franklin in 1728, that produced the piece, which also used letterpress.

The job included two simulated issues of *The Pennsylvania Gazette*, with current news items written in a quaint colonial style. For example, "Michael Mantle, Esq., in St. Petersburg, has trouble with his leg again," "Cigarettes, with sieves, sell at 27 cents," etc.

Type was nine-point Caslon, set Monotype, with long "s" and other early-American characteristics prominent. The aged appearance of the paper was achieved by offset, with an overall tint of specially prepared ink. A heavy sheet with sawdust glued to it was put under the blanket to give uneven backing and "picks" were produced by throwing dirt onto the form roller!

After being printed by letterpress the sheets were seared with a blowtorch to antique them, and the papers were distributed at the hotel by boys in colonial costume.★

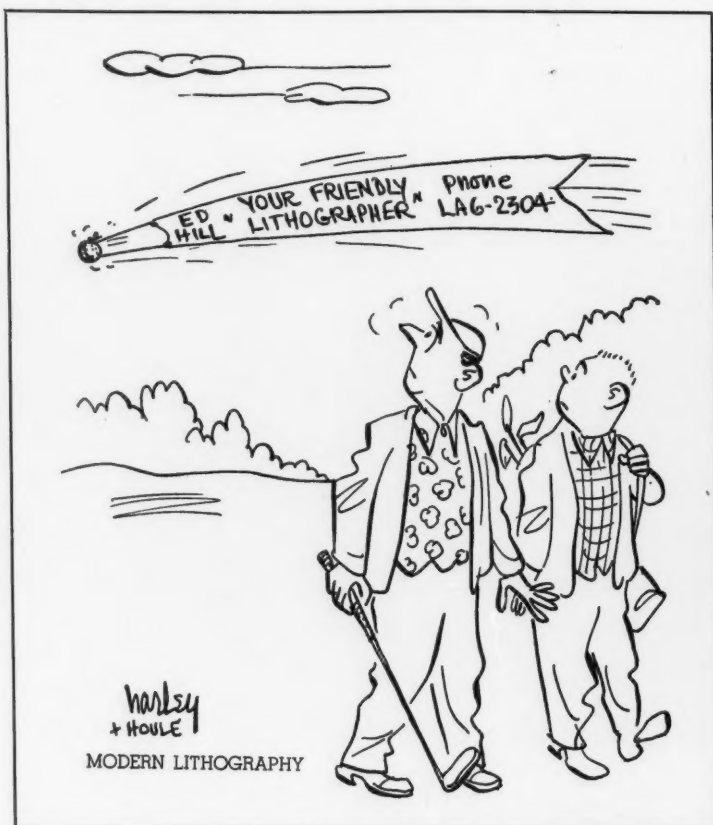


more about the advantages of doing business with the shop.

Last month James Gray, Inc., giant New York letter shop and litho plant, took time out to let its customers know about a TV program showing activities in the plant. Gray used a postcard to announce that the popular "Tonight" show on NBC-TV was to be devoted to the company's plant.

ML

McCormick-Armstrong, Kansas creative printers and lithographers, has done a timely service to all in reproducing a handsome booklet containing the Bill of Rights—the first 10 amendments to the Constitution. An accompanying card explains that "freedom is not native to the soil of any land. It flourishes only among people who hold it more dear than life itself. . . . At this moment in history it is fitting that we as Americans should thankfully reexamine the



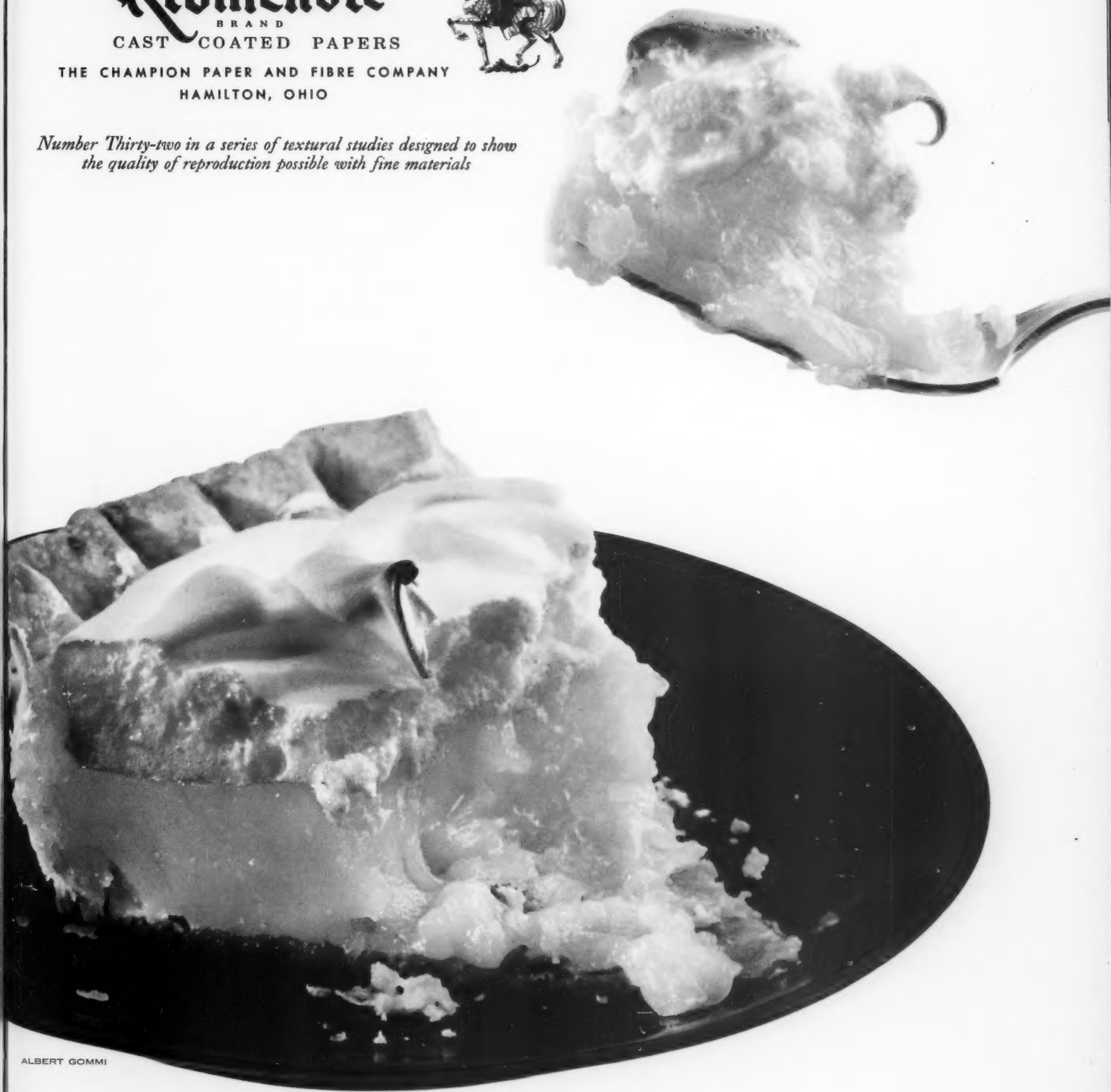
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Jerry Gleason, (l.) Ideal Roller Co., Norman Mack, Van Son Holland Ink Co., and James Ebbert, director of the Manhattan School of Printing, during the forum on new developments in water rollers, held at the school.

**New York students, shop men
See demonstration on new**



Paper, Knitted Dampener Covers

NEW YORK students and lithographers from commercial shops had an opportunity recently to hear details of two recent developments in dampening and then saw the devices demonstrated on offset presses.

The occasion was provided at Manhattan School of Printing, at the second open forum on offset topics being sponsored by Dean Miller, head of the school. A large group of students and shop men from the city were in attendance at the evening meeting as Jerry Gleason, of Ideal Roller & Manufacturing Co. and Norman Mack, of Van Son Holland Ink Corp. of America described their products.

The Ideal system is called Plast-O-Damp. It consists of a disposable lintless dampening cover (paper) combined with and used over a special rubber dampening base.

The Holland product, developed and patented by Mr. Mack, includes Dis-Base, a sponge rubber roller base and Dis-Cover, a knitted cotton tube fabricated to the diameters of the various water roller cores.

(Both products have been described in feature articles in MODERN LITHOGRAPHY).

Both systems are used to replace the conventional molleton covers on form rollers. Ideal uses one form roller, while Holland uses two.

Mr. Gleason described the parch-

ment dampener cover as "a better means of water control at small cost." He cited these advantages with the product:

1. Uniform color and brilliance,
2. Absence of "hickies."
3. No break-in needed.
4. No cleaning necessary.
5. Ease of application.
6. Quick interchange with no re-setting.

He estimated the cost at three cents for a small roller and seven cents for a 76" press. (This cost is for the paper, and does not include the preparation of the roller base.)

The roller is coated with a synthetic rubber base, stepped down at each end so that rubber bands used to fasten the parchment are level with the roller. He showed the group how to apply the covers. First he wet a strip of Plast-O-Damp, about three inches wide. He turned the roller with his left hand and applied the paper with his right hand, maintaining an overlap of $3/16$ to $1/4$."

The four advantages of Mr. Mack's system, he stated, are:

1. No break in time.
2. No lint, no seam.
3. Inexpensive.
4. Long wear.

As in the Ideal system, the roller core first is prepared with foam rubber. The knitted sleeve then is pulled over the roller and tied at the end.

"We want the sleeve to get greasy," Mr. Mack asserted. "Ink and water mix on the face of the Dis-Cover. This is important for the reduction of water drops on the surface. It yields blacker blacks and better color." He said he has experimented with using one and two rollers and prefers the latter, because "one applies the moisture and the other levels it out."

Following are some of the questions answered by the speakers before their products were demonstrated in use on offset presses in the school's print shop:

Q: Can water be controlled for short runs with Dis-Cover?

MACK: Yes. Most are in use in short run plants.

Q: Will the paper dampener pick up grease?

GLEASON: No. It is resistant to ink.

Q: Is there any lint on the Dis-Cover?

MACK: Any woven fabric has lint, but the resin in our product holds it down and preshrinks the sleeve.

Q: Aren't there possibilities of high and low spots because of the overlap with paper covers?

GLEASON: The paper is only .004" and the roller is prepared so that, with the paper cover, it has a tolerance of + or — .005" so this problem is avoided.

Q: Will the Dis-Cover stretch?

MACK: Not if you put it on wet.

The meeting was concluded on a humorous note when the speakers were asked if the same core could be used with both products. They ruefully agreed that "it might work."★

SUPERTUFF

COATED COVER

.....*is* **SUPER**

for fine screen printing —
letterpress, offset, silk screen,
varnish or lacquer.



for creating a quality impression
of elegance and refinement.

.....*is* **TOUGH**

for hard usage, rough handling
and wear-resisting durability.



The combination of these two functional elements makes Supertuff an ideal and highly versatile cover stock for catalogs, annual reports, spec-sheet binders, menus, sales manuals, self-mailers, and counter displays.

No other cover stock matches Supertuff!



1907 — 50 YEARS — 1957

**the APPLETON COATED
PAPER COMPANY**

1204 N. MEAD ST.
APPLETON, WIS.



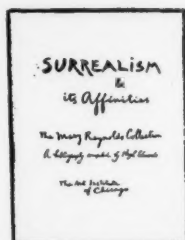
Design in Chicago:

STA Picks 102 Winners

But judges criticize overuse of worn-out gimmicks in a large number of entries.



Hillison & Etten



Meriden Gravure



D. F. Keller Co.

By *H. H. Slawson*
Chicago Correspondent

JUDGES of the 30th annual exhibit of "Design in Chicago Printing," sponsored by the Society of Typographic Arts, were hard put this year to find anything distinctive enough to be worth hanging in the show which was opened at the Chicago Art Institute, April 19.

Of nearly 1,000 entries they finally selected 102 pieces which had received at least two affirmative votes. The practice of awarding medals had been abandoned several years ago and meritorious designs, including this year's 102 "winners," are given a Certificate of Excellence. Judges were Louis Dorfsman, advertising director of CBS Radio, New York, Herbert Lubalin, art director and typographer, Sudlen & Hennessey, New York, and Robert S. Robison, School of Fine Arts, Washington University, St. Louis, Mo.

The judges, according to an STA spokesman, were not surprised at the lack of new ideas in the Chicago show. He quoted them as saying this is also characteristic of current New York design shows.

Chicago's top advertising, the spokesman went on, "reflects the growing use of tricks and techniques considered startlingly original just a season or so ago. They're using such devices as blind embossing and photographs and they have a nearly universal penchant for 'high key' photography. But they are making a fashion out of such interesting approaches to an extent that makes them no longer interesting."

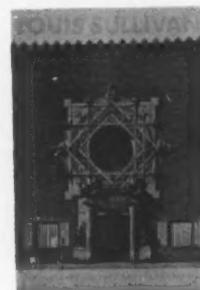
As to the reason for this situation, he declared "It's a natural effect of our mass media system. We all see the
(Continued on Page 141)



Veritone Co.



Hillison & Etten



Hillison & Etten

"The 'Glow-White' of Calcofluor* adds to the clean, crisp look of this Hotpoint brochure."

—SAYS MR. GORDON B. STEVENSON, DIRECTOR OF PRODUCTION, THE VERITONE COMPANY, CHICAGO



Calco[®]
Symbol for Quality Dyes

"CALCOFLUOR-treated paper was selected for this job because it was essential that the whites in the illustrations be clean and sparkling. We know that printing on papers containing CALCOFLUOR White adds dramatically to the range and effect of colors. Other whites move well up in the grey scale when compared with CALCOFLUOR."

No doubt about it! The bright white of CALCOFLUOR-treated stock makes halftones and text clearer...sharper...crisper...with maximum contrast. Every day, advertising production men...lithographers...printers...are discovering the new "Glow White" sparkle that CALCOFLUOR-treated papers give such items as:

Catalogs • Annual Reports • Sales Literature • Manuals
Business Cards • Folders and Greeting Cards • Programs • Books
Pamphlets • Labels • Packages • Letterheads • Business Forms

Just comparing CALCOFLUOR-treated paper with any sheet of ordinary white will convince you. Try these papers! Just ask your paper jobber for samples, or write to Cyanamid for further information.

*Trademark

CYANAMID

**AMERICAN CYANAMID COMPANY
DYES DEPARTMENT
Bound Brook, New Jersey**

New York • Chicago • Boston • Philadelphia
Charlotte • Providence • Atlanta • Los Angeles
Portland, Oregon

North American Cyanamid Limited • Dyes Department
Montreal and Toronto

CALCOFLUOR

LITHO CLUB NEWS

Milwaukee

Offset Blankets Discussed

"Manufacture, Care and Use of Offset Blankets" was the topic discussed by R. R. Lewis, technical director, Vulcan Rubber Products, New York, at the May 28 meeting of Milwaukee Litho Club. Mr. Lewis characterized in detail the major functions of an offset blanket. In pointing out that the blanket is a very important medium in offset printing, Mr. Lewis indicated blankets should possess these qualities:

Conform well to the blanket cylinder without movement after correct tension lock-up; transfer the inked image from plate to paper; help hold good register on impression during the run; carry the right amount of surface tack to enable good ink trapping without pilation; repel water from the plate so as to avoid paper coating from sticking to blanket surface or adhering to or following the blanket cylinder.

New members recently welcomed into the club are Norman Lindauer, Western Printing & Lithographing Co.; Paul S. Poss, Graphic Offset, Inc. and Russell H. Madison, RBP Chemical & Supply, Inc.

Philadelphia

Hear Meeting Reports

The Litho Club of Philadelphia, in keeping with its policy of presenting top notch programs, presented at its May 27 meeting a report on the latest research developments in the industry. The report was given by Joseph W. Mazzaferri, partner in the Colorcraft Lithoplate Co. of Philadelphia. Mr. Mazzaferri was chairman of the 9th annual meeting of the Technical

Association of the Graphic Arts, held May 13-15 at Benjamin Franklin Hotel, Philadelphia. He reported on that meeting as well as the 7th annual meeting of the Research and Engineering Council of the Graphic Arts Industry, conducted May 16-17 at the Ben Franklin.

New members welcomed to the club at the May meeting were Beryl J. Wolk, William Schweiker, Anthony Amato and Donald L. Welk, all associated with Goodway Printing Co.

Howard Haecke, entertainment chairman, announced that the club's annual outing will be held Sept. 28 at Valley Forge Country Club.

St. Louis

Initiate Student Contest

A contest for students in accredited litho schools in the St. Louis area has been initiated by the St. Louis Litho Club and approved by the National Association of Litho Clubs. A prize of \$25 will be awarded to the outstanding student who will be selected for work in lithography and for personality. The student also will be honored at an annual dinner.

At the club's May meeting, Walter Blattenberger, NALC president, informed members of the program set up at the recent NALC convention to distribute more technical information to all clubs.

Club members have agreed to donate one dollar each to the Lithographic Technical Foundation, beginning this month. This will be an annual contribution.

A four-page monthly bulletin, produced offset on an 11 x 17" sheet, and folded to a size 8½ x 11", is the newest project of the club. The bulletin not only will announce meeting dates and program, but also will con-

tain brief technical information in accordance with the club's own program to disseminate industry information to its members. First issue of the bulletin, presently unnamed, will be in September.

A discussion and demonstration of platemaking is on the program for the June 6 meeting which will be the closing meeting of the season. Regular meeting will be resumed in September.

Shreveport

Plan To Join NALC

At a recent meeting of the board of directors of Shreveport Litho Club, a resolution was passed authorizing the club to apply for membership in the National Association of Litho Clubs. A constitution and by-laws have been printed and distributed to the membership.

Plans are under way, directed by Irwin Campbell, to charter a bus to attend the Southwest Litho Clinic to be held in Dallas, June 21-23. Members also are planning to send samples of work to be placed on exhibition at the Clinic.

Houston

View Duplicating Machines

The Houston branch of Addressograph-Multigraph Corp. was the scene of the May meeting of Houston Litho Club where various types of machines handled by the company were demonstrated. A sound-color film titled "The History of Multilith Duplicating" was shown. The new Verifax masters for multilith also were demonstrated, along with some new developments in paper and aluminum presensitized masters.

At the board of directors meeting, three new members were voted into the club. They are Fred Billingslea and D. W. McDonald, Jr., both of Olmstead-Kirk Paper Co. and Clarence Rearik, Thotostat Corp.

A panel discussion was the main event at the April meeting of Houston Litho Club. John Brand and Alan

Black led discussion on cameras; Otis Muckenfuss on layout; William Kauzlarich on plates; William McDermott on press; and Army Emmott on bindery.

New members initiated were Richard Heidig, Charles Wideman and R. J. Courtney.

At the April board meeting, John D. Waring, of Howard Flint Ink Co. and Lillian Redinbaugh, of B. W. Pike Co. were voted as new members. May meeting plans call for a demonstration to be held at the Addressograph-Multigraph Co.

Chicago

Paper Night Program

O. H. "Doc" Runyan was the featured speaker at the May 23 meeting of Chicago Litho Club, held at Toffenetti's Restaurant. Originally, the club had planned a field trip to Container Corp.'s Chicago board mill, but because of remodeling there, the tour had to be cancelled. Determined to have a "Paper Night" program anyway, "Doc" was called on to substitute. He is a recognized authority on paper for printers.

When not talking or teaching paper, Mr. Runyan serves as legislative representative at the state capital for the Graphic Arts Association of Illinois and in his talk he briefed

the lithographers on the status of legislation affecting printers still pending in the state assembly at Springfield as it moves toward adjournment June 30.

The May meeting was the Chicago club's last education session before the summer recess of two months. For the first fall meeting in September, a program on "proofing" is planned by the education committee, whose chairman is James K. Martin, assistant manager of the Chicago Lithographic Institute. James Ludford of Chicago Lithoplate Graining Co., and president of the Chicago club, reminded members that the annual golf party is scheduled for July 13 at Midwest Country Club, near Hinsdale, Ill.

Washington

Kronenberg Scheduled to Speak

John L. Kronenberg, manager of the Lithographic and Label Paper Division of S. D. Warren Paper Co., was scheduled to be the featured speaker at Washington Litho Club's May 28 meeting.

New members admitted to the club include Ira Kaplan, Washington Planograph Co.; Robert Sheldon, Review and Herald; and F. R. Erb, Miehle Printing Press & Mfg. Co. It was announced that the third annual fishing party will be held July 27.



Industry friends and associates who honored Paul Heideke recently at a meeting of Washington Litho Club are, l. to r., seated, Al Rossotti, Bill Heintz, Frank Corcoran; standing, Harvey Glover, Bill Stevens, Al Tucker, Mr. Heideke, Walter Soderstrom and Charles Williams.

Boston

Fraggos Elected President

James Fraggos, executive vice president of Halliday Lithograph Co., Boston, was elected president of the Boston Litho Club at its meeting May 6. Mr. Fraggos, the 11th president of the club, succeeds Albert A. Richards, Recording & Statistical Corp.

Other officers elected include Malcolm O. Delano, Cuneo Press of New England, Inc., 1st vice president, and R. Curtis Reed, IPI, 2nd vice president. Vincent J. Aliberte, Acme Printing Co., was re-elected as secretary-treasurer.

Members elected to the board of governors for three year terms are Anthony F. Fucillo, Edward Bellone, Peter R. Kimball and John A. Rakuskas.

Guest speaker was William S. Zorigian, Zorigian Studio, Boston, who discussed problems of the artist in relation to the printer. He urged more consistency among printers and lithographers in regard to knowing what they want. Asked whether advertising agencies are consistent toward the printers, he admitted they are not, but added that agencies are working toward such a goal.

Twin City

Fishing Trip Planned

Once again the Twin City Litho Club will make its annual outing a fishing trip. This year the affair will be conducted at Hartwog's Island View Resort, Isle, Minn., June 7-9.

At the annual convention of the National Association of Litho Clubs held last month in Chicago, the club was well represented. Official representatives were Herb Werner, president; Edward Sorenson, past president; Marvin Haenze, vice president; and Herman Goebel, NALC treasurer. Some of the unofficial representatives included Bud Marshall, Harold Smith, John Ahern, John Mackey, Jack Carroll and Carl Struck.

"The Use of Light in the Printing" (Continued on Page 83)

"Hickey" troubles?

Try this new
easy way to
minimize "hickies"
in offset
printing



Are "hickies", those troublesome little doughnut rings that turn up in solid background areas, spoiling the quality look of your work? Next time use BBD's "PRINTLITH #545" as your color extender and see the difference.

"PRINTLITH #545" is a unique tack-free, all-purpose transparent extender for reducing colors and making tints. However, because it increases the flow-rate of your ink and reduces the pull of the blanket against the stock, it also eliminates "hickies" in many cases.*

Unlike old-style transparent whites and other compounds, "PRINTLITH #545" may be used in any amount without causing scumming or greasing, nor changing your ink's normal drying rate. It also adds extra sparkle and contributes to cleaner printing on all grades of stock, especially coated papers.

"PRINTLITH #545" may be mixed—on the slab or in the fountain—with any ink formulation requiring a transparent extender. Why not try a 5-lb. can this week?

* Since "hickies" can be traced to a variety of sources "PRINTLITH #545" will not solve the problem in every case. Nevertheless, a large number of enthusiastic offset-lithographers report that "PRINTLITH #545" has reduced their "hickey" troubles considerably.

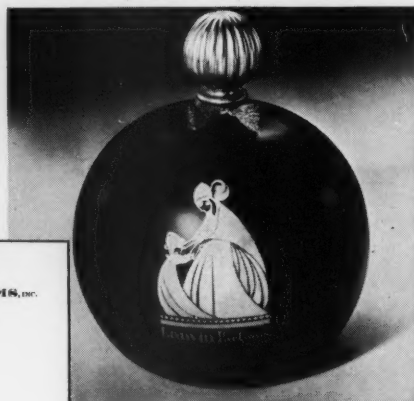


Bensinq Bros. and Deeney
Better Inks for Better Printing
3301 Hunting Park Avenue, Philadelphia 29
CHICAGO SAN LEANDRO, CAL.
CAMBRIDGE, MASS. MONROE, LA.



Prominent Users of Strathmore Letterhead Papers: No. 128 of a Series

*One of the most famous
packages in the world...
the original black and gold
Lanvin bottle.*



LANVIN - PARFUMS, INC.

187 FIFTH AVENUE
NEW YORK 22, N. Y.
FUND. 1908

Quality

makes a subtle point

The look of its letterhead is a clue to a company's character. Reflecting the Lanvin precept that quality—like fragrance—is to be *discovered*, not announced, the classic Lanvin letterhead is as subtle as its own fine perfume.

Strathmore papers never shout their superiority, rather their quality and dignity add an intangible sincerity to a letterhead. It is no accident that an impressive number of important firms use Strathmore. It would be no mistake if yours did the same.

Lanvin-Parfums, Inc. has been promising quality and giving it for more than a quarter of a century...ever since the famed French couturiere, Mme. Jeanne Lanvin, created a series of fragrances for her own use and that of her customers. Her original *My Sin*, *Arpege*, *Scandal*, *Rumeur* and *Pretexte* are beloved by women in every part of the world as superb examples of "the best perfume Paris has to offer."

STRATHMORE LETTERHEAD PAPERS: STRATHMORE PARCHMENT, STRATHMORE SCRIPT, THISTLEMARK BOND, ALEXANDRA BRILLIANT, BAY PATH BOND, STRATHMORE WRITING, STRATHMORE BOND. ENVELOPES TO MATCH CONVERTED BY OLD COLONY ENVELOPE CO.

STRATHMORE THIN PAPERS: STRATHMORE PARCHMENT ONION SKIN, STRATHMORE BOND ONION SKIN, STRATHMORE BOND AIR MAIL, STRATHMORE BOND TRANSMASTER, REPLICA.

Better Papers are made with Cotton Fiber

STRATHMORE

Makers of Fine Papers

STRATHMORE PAPER COMPANY, WEST SPRINGFIELD, MASSACHUSETTS

Strathmore
Advertisements
in national
magazines tell
your customers
about the
letterheads of
famous American
companies on
Strathmore
papers. This
makes it
easier for
you to sell
these papers,
which you
know will produce
quality results.

This series appears in:

TIME
NEWSWEEK
BUSINESS WEEK
PRINTERS' INK
SALES
MANAGEMENT
PURCHASING
ADVERTISING
REQUIREMENTS



LITHO CLUB

(Continued from Page 80)

Industry" was the topic of discussion at the May meeting of Twin City Litho Club held at the Covered Wagon. John F. Williams and C. W. Frederick, both of General Electric Co., demonstrated how incorrect light and different lights affect color as seen by the naked eye. With the use of a camera, Mr. Williams showed how different lights bring out or subtract certain values in color. Using slides, he graphically depicted the correct lighting for a lithographic plant.

New members initiated into the club are Neil O'Neil, Jack Carrol, Ray Lawrence and Frank Monty.



John F. Williams, left, and C. W. Frederick illustrate effect of light on colors at Twin City Litho Club meeting.

Dallas

Harris Movie Shown

Edward Deever, Harris-Seybold Co.'s Dallas representative, presented a movie of the new Harris 14" x 20" offset press and the new Harris-Seybold cutter for members of Dallas Litho Club at their May meeting. The club's annual overnight fishing trip was conducted May 17-18 at Pa Hart's Lodge at Grand Lake.

Litho Clinic Program Set

"How to Print a Better Dot" is the general theme for the seventh annual Southwest Litho Clinic, to be held June 22-23 at the Adolphus Hotel, Dallas. The annual affair is sponsored by the Dallas and Houston Litho Clubs.

The opening session will center on "Art Preparation and Camera" and will include the following: How the lithographer prefers to have his art

prepared; use of autopositive film; value of the ruby red outline mask; and reproduction of wash drawings. Also included in the June 22 morning session is a discussion on "Stripping and Platemaking." This part of the program will include instruction on vinyl base layout sheets; register pin system; P.B. film; and new advancements in copper aluminum deep etch platemaking.

The afternoon sessions will deal with "Press Makeready" and "Press Operation." Scheduled for discussion are these topics: Importance of stock cutting; maintenance and cleanliness; feeder setup; paper dampener covers; care of the plate; proper printing pressure; mixing ink to suit the paper; and register.

A special program for small press operation has been scheduled for June 23. This is in addition to a question and answer panel program designed to cover all phases of lithography.

Canton

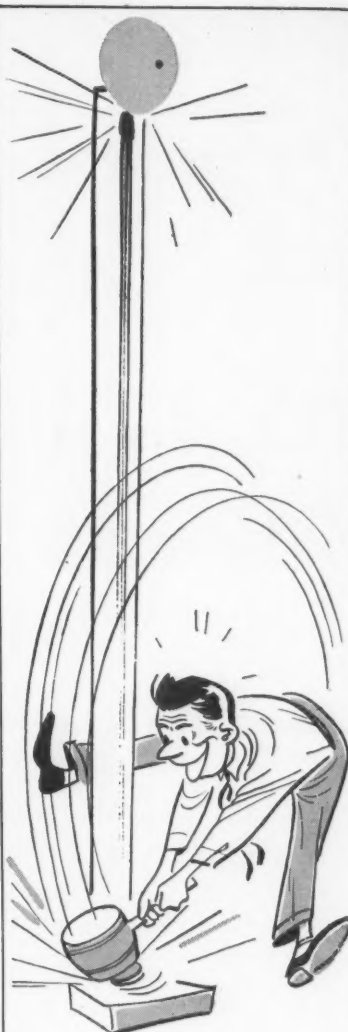
Cost Accounting Discussed

Frank Turner, staff member of the National Association of Photo-Lithographers, spoke on "Cost Accounting in Lithography" at the April meeting of Canton Litho Club held at the Linway Restaurant. Through the use of a previously prepared chart, Mr. Turner used a hypothetical lithograph company and, step by step, showed how a modern, workable cost system could be set up. A question and answer period followed his remarks.

Discuss Inks

The May dinner-meeting of Canton Litho Club was held at the Linway Restaurant with a number of students from the Printing Department of Timken Vocational High School of Canton in attendance. Moderator for the evening was Milton Cornman of IPI who is president of the club.

A movie was shown, titled, "This is Color", and a discussion period concerning various problems in running color on the press followed.



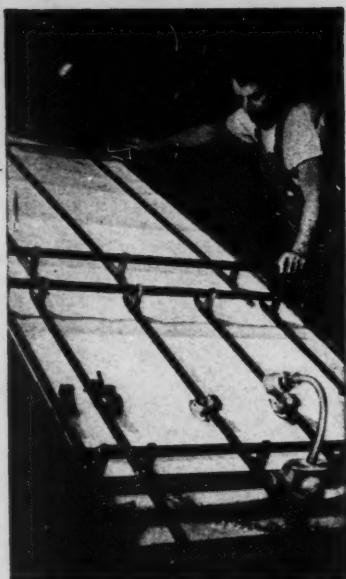
**Your
SELF-ADVERTISING
CAMPAIGN
may Ring
the Bell!**



Step right up and win a P.I.A. Self-Advertising award. Your entry may win one of three \$1,000 prizes and a "Benny." Closes September 13, 1957. Start on yours now!

Write for Rules and Entry Blank!

PRINTING INDUSTRY OF AMERICA, INC.
5728 Connecticut Avenue, N. W.
Washington 15, D. C.



Hamilton Bond prints well

*Your work is
as good as
your bond*

There are at least 15 reasons why Hamilton Bond brings out the best in your work:

1. Blended, top-quality pulps
2. Bright blue white
3. 10 distinctive, printable colors
4. Uniform in quality
5. Clear formation
6. Even printing surface
7. Pre-humidified
8. Moisture-proof wrapped
9. Lies flat, feeds well
10. Genuinely watermarked
11. Accurately trimmed
12. Strong and durable
13. Folds well
14. Erases well
15. Good opacity

Remember that your work is as good as your bond—and specify Hamilton!

Hamilton Papers



HAMILTON PAPER COMPANY

Milquon, Pa.

Mills at Milquon, Pa., and Plainwell, Mich.
Offices in New York, Chicago and Los Angeles

Public Printer in Buffalo

"American democracy was born with printing ink in its veins," U. S. Public Printer Raymond Blattenberger said in Buffalo, N. Y.

"Our revolution was conceived by the press and brought to maturity by the printed word," he added.

"In the early days of American history," Mr. Blattenberger said, "the printer came into every new community on the trail of the pioneers and helped from the start in the development of frontiers, among them the Niagara Frontier."

Mr. Blattenberger, director of the Government Printing Office in Washington—largest printing operation in the world—spoke at the spring dinner of the Printing Industries Association of Western New York in Hotel Lafayette.

"Printing," Mr. Blattenberger said, is "essential to modern living" and a "natural adjunct to progress." The printing industry is a \$5,000,000,000-a-year business with 45,000 plants spread across the nation, he said, adding that the industry is modernizing at the rate of \$250,000,000 annually.

As a profession, Mr. Blattenberger said, printing "is as essential as law or medicine." As a trade, he added, it is "no less" than construction, steel, autos or "any other trade."

Bruce Rogers Dies

Bruce Rogers, one of America's leading type and book designers, died May 18, four days after his 87th birthday, at his home "October House," in New Fairfield, Conn.

Mr. Rogers, known the world over as the designer of more than 400 books, including the famous Oxford Lectern Bible, succumbed after a slight illness resulting from a fall into a pool in his lawn.

He was the designer of the Centaur type face and had received numerous medals, awards and acclamations from graphic arts groups. In 1936 he was awarded the Medal of the American Institute of Graphic Arts.

His career started with Riverside Press, Cambridge, Mass., after graduation from Purdue University. In his teens he produced a hand-colored edition of William Cullen Bryant's "Forest Hymn."

Litho Club Guide

BALTIMORE

Robert H. Scheuer, Secy.
2118 Brannen Rd., S.E., Atlanta

BALTIMORE

Harold E. Hackman, Secy.
2950 Loch Haven Rd., Baltimore 18.

BOSTON

Vincent J. Aliberte, Secy.
2010 Revere Beach Pkwy, Everett
49, Mass.

BUFFALO

Edmond S. Sendker, Secy.
978 Ellicott St., Buffalo 9

CANTON

Robert Scheppan, Secy.
1510 Meadow Lane, N.W., Canton 9

CHICAGO

Emil Winter, Secy.
1301 Blackhawk St., Chicago

CINCINNATI

Buford Payne, Secy.
9 Burnham St., Cincinnati

CLEVELAND

Kenneth Aldridge, Secy.
1988 Caroline Dr., Mentor, O.

COLUMBUS

James Bishop, Secy.
5077 Big Gun Rd., Grove City 2, O.

CONNECTICUT VALLEY

Edward J. Yuskevics, Secy.
1847 Paquonock Ave., Paquonock,
Conn.

DALLAS

Donald A. Cauley, Secy.
1807 Mentor St., Dallas

DAYTON

Robert J. Mackin, Secy.
333 Salem Ave., Dayton 2

DETROIT

John Murphy, Secy.
13110 Santa Rosa St., Detroit 38

FORT WORTH

Vernon Kageler, Secy.
4933 Dunlap Dr., Fort Worth

HOUSTON

Frances Porter, Secy.
2301 Huldy St., Houston 19

LOS ANGELES

Curtis Bourland, Secy.
7101 W. 93rd. Pl., Los Angeles 45

MILWAUKEE

Jack W. Miller, Secy.
2572 N. 21st St., Milwaukee

NEW YORK

Louis Happ, Secy.
11 Darby Court, Malverne, N. Y.

PHILADELPHIA

Joseph H. Winterburg, Secy.
618 Race St., Philadelphia 6

PIEDMONT

Bernard A. Wilmering, Secy.
1503 Madison Ave., Greensboro, N. C.

ROCHESTER

Edward C. Potter, Secy.
198 Weston Rd., Rochester 12.

ST. LOUIS

Eugene Hanson, Secy.
4440 Bessie Ave., St. Louis 15

TULSA

Fridolph A. Holmberg, Secy.
1712 S. Owasso St., Tulsa

TWIN CITY

Leonard J. Holzinger, Secy.
1405 Chicago Ave., Minneapolis 4

WASHINGTON

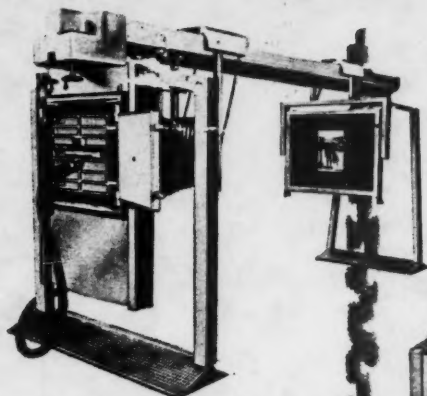
Raymond Geegh, Secy.
P.O. Box 952, Ben Franklin Station,
Washington 4

CENTRAL WISCONSIN

Richard Kiser, Secy.
Route No. 2, Box 597, Menasha, Wis.

LANSTON OFFSET EQUIPMENT

time savers
and moneymakers in any
offset plant . . . LOW IN COST
HIGH IN EFFICIENCY



THE LANSTON Camera

The originator of the now widely copied precision overhead camera offers the first low priced overhead production camera. It handles photographic requirements economically, speedily and accurately. Compact in design, rugged aluminum and steel construction and easy to operate. Features ground glass in swinging frame, all metal, manifold operated vacuum film holder, complete dark-room operation, handles film up to 18 x 22", glass covered pressure type copyboard . . . all for the basic price of \$2950.00.

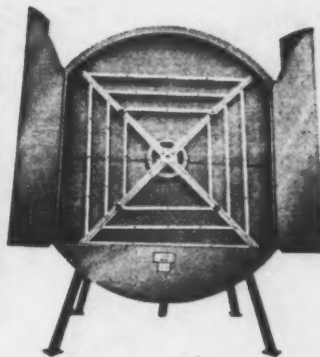
LANSTON *Magnastep* STEP AND REPEAT MACHINE...



A new, improved, rugged aluminum and steel vacuum printing frame—equipped with a step and repeat attachment—to speed up the production of press plates up to 32x41". Economical, fast, accurate placing of image on plate without costly masking and registration. All controls conveniently located at operator's finger tips. Magnastep can also be used for multi-color production. Basic price \$2950.

NEW, IMPROVED LANSTON VERTICAL PLATE COATING MACHINE

Requires an average of 38% less floor space than horizontal type whirlers. Employs radically new air drying system—thermostatically controlled with completely enclosed variable speed drive unit, speed regulated by Tachometer. New, improved method of mounting and clamping plates and glass. Available in 3 sizes (special larger sizes on request) . . . in tank diameters of 68", 85" and 112" at \$1600, \$1950, and \$2450.



LANSTON MONOTYPE COMPANY

A DIVISION OF LANSTON INDUSTRIES INCORPORATED

24th & Locust Streets

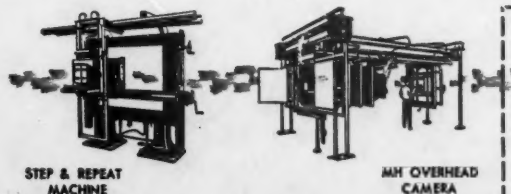
Philadelphia 1, Pa.

BRANCHES: Atlanta—Chicago—New York—Philadelphia

DISTRIBUTORS: Rocky Mountain: A. E. Heinsohn Inc., Denver, Col.

South America: Companhia Lanston Do Brazil, Rio De Janeiro

Chicago: Roberts & Porter, Inc.



STEP & REPEAT
MACHINE

MH OVERHEAD
CAMERA

TYPE SET IN MONOTYPE Century Expanded and 20th Century Series

LANSTON MONOTYPE COMPANY
(A Division of Lanston Industries Incorporated)
24th & Locust Streets, Philadelphia 1, Pa.

ML

Send new literature on the Lanston Camera ☐ Step & Repeat Machine ☐
MH Overhead Camera ☐ Vertical Plate-coating Machine ☐ Magnastep ☐

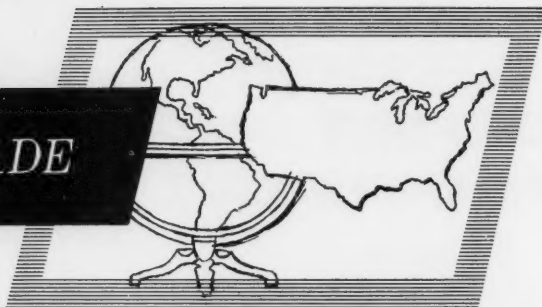
NAME.....

FIRM.....

ADDRESS.....

CITY.....STATE.....

NEWS about the TRADE



Webb Offset Section Meeting

The annual spring meeting of the Web Offset Section, Printing Industry of America, will be held June 10-11 at the Westchester Country Club, Rye, N. Y., it was announced last month by Hyman Safran, president of the group.

The tentative program includes a plant visit to Time-Life Laboratories, Springdale, Conn., Monday morning, June 10. The afternoon session will be devoted to discussions of equipment, materials and supplies; to markets and sales; and to production problems.

A special session for supervisory personnel has been arranged for June 11 which will enable foremen and superintendents to exchange experience on questions of web offset production, makeready, spoilage, training and costs. Following this session, a plant tour will be made at Western Printing & Lithographing Co., Poughkeepsie, N. Y.

Expansion at Cincinnati Litho

Major expansion of the plant and facilities of Cincinnati Lithographing Co., Inc., at a cost of approximately \$250,000, has been announced by Harry E. Brinkman, president. A plant addition of 4,500 sq. ft. will bring total floor space to more than 40,000 sq. ft. New equipment now being installed includes two two-color Miller man 56" presses, a single-color ATF Super Chief 29" press and a Robertson precision color camera.

The expansion program also includes appointments of four executives. They are Thomas E. Brinkman, superintendent of production, to vice president and sales supervisor; Charles L. Diedling, formerly in

production and quality control, to superintendent of production; Robert H. Brinkman, a member of the quality control staff, to manager of production and quality control; and Robert W. Fisher, foreman in the lithographic art department, to general plant superintendent.

Fenn & Fenn Marks 40th Year

Fenn & Fenn, Inc., New York lithographers at 75 Varick St., is celebrating its 40th year in the



T. C. Fenn



G. C. Fenn

graphic arts industry. Beginning as printing brokers at 18 Beekman St. in 1917, the firm was founded by Theodore C. Fenn, Sr. and Gustave C. Fenn. It developed from a one room office to its present modern plant with the latest single and two color equipment.

Three sons, Theodore C. Fenn, Jr., Richard W. Fenn and Eugene H. Fenn have joined their fathers in the business. Having first worked in the plant and office, they now are sales representatives.

Abrams Named Hoffman V.P.

David Abrams has been named vice president in charge of plant operations for Harry Hoffman & Sons, Buffalo printers and lithographers. Mr. Abrams formerly was sales promotion manager for J. N. Adam & Co., Buffalo.

Gartner Litho Sold to General

General Printing & Lithograph Co., Los Angeles, has purchased the Gartner Printing & Lithograph Co., also of Los Angeles, it was announced by V. R. Youngquist, president of General. General will consolidate the equipment and personnel of both plants in the Gartner building, with a 65,000 sq. ft. area. The combination of facilities of the two plants makes General one of the largest commercial printers in the Southwest.

The actual movement of General's facilities to Gartner's plant has been scheduled over a four-month period to prevent any disturbance in the work production at either site. Major equipment in the new plant will include a four-color press, one 41 x 54" single color press, three 36 x 48" single color presses, a 36 x 48" two color press and one 23 x 35" two color press. Because of ample room available in the new location, plans are being made to bring in additional high speed equipment.

Crown Printing Organized

James C. Hunger and George R. Reed of Oakland, Cal., have reorganized the firm formerly known as the Superior Marker Co. under a new name, the Crown Printing Co. A combination plant, it is adding job work in lithography, letterpress and silk screen to its previously specialized plastic printing.

Swope Purchases Forsyth

Swope Industrial Sales Co., P.O. Box 503, Bryn Mawr, Pa., has purchased the D. W. Forsyth Co., Philadelphia, manufacturers of Stick-E-Back, molleton roller covers. Swope now will produce and market the roller covers.

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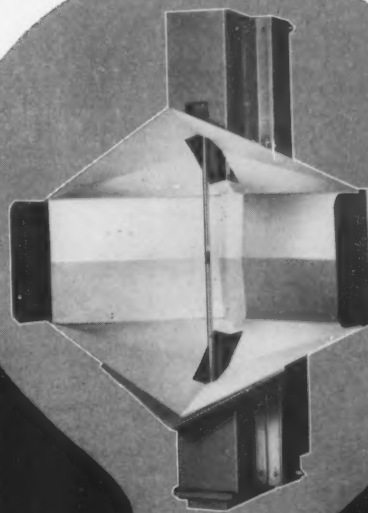
THE NEW GRAFARC CHALLENGER CAMERA ARC LAMP

is energized, a rugged, new type dual function motor instantly advances the carbons, strikes the arc, backs up the carbons to establish the correct arc gap length, and steadily feeds the carbons at a rate which maintains the proper gap throughout the burning of the trim. Its action is sensitive to both current and voltage conditions at the arc, and automatically compensates for any variables in the burning rate of the carbons. Ample motor size insures reliable drive of the carbon feeding mechanism at all times. The multiple function of the motor insures quick settling of the arc making the Challenger particularly adaptable to accurate exposures of as short as five seconds.

New finger tip control automatically separates the carbon holders to full expanded length for insertion of new carbon trim.

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A connector cord and plug assembly eliminates the possibility of error in connecting the lamps to the power supply. Two receptacles in the transformer housing permit

Dual Lamp Operation From One Transformer

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Edward Swayduck, center, president of Local 1, Amalgamated Lithographers of America, presented honorary memberships in the local to Robert F. Wagner, Mayor of the City of New York, and to Victor Riesel, labor columnist, at the recent celebration of the local's 75th anniversary in New York.

ALA Celebrates 75th Year

In honor of the 75th anniversary of the founding of the Amalgamated Lithographers of America, Mayor Robert F. Wagner of New York, at the union's anniversary dinner April 27 at the Waldorf Astoria Hotel, proclaimed April 27-May 4 as "Lithography Week" in New York. Mayor Wagner accepted honorary membership in the ALA and was presented with a plaque by Edward Swayduck, Local 1 president.

Mr. Swayduck also presented honorary memberships in the union to Victor Riesel, famed labor columnist who addressed the 850 persons in attendance; Benjamin Robinson, general counsel to ALA; and to Mary Hough, office manager of Local 1 for the past 21 years.

Special plaques also were presented to Patrick Hanlon and Frank Schei, both of whom are 90 years old and have been members of Local 1 for 63 years. An additional 12 scrolls, in recognition of more than 35 years service in Local 1, were given to Abraham Davis, Frank Bleyman, John Ummerle, John J. Walsh, Joseph M. Yenzer, John Ulrick, Feodor Wolf, Matthew L. Frese, Edward L. Hermann, Charles A. Kasilke, Louis

Loeffler and Herman Litschke. Similar scrolls also were sent to all other Local 1 members of 35 years and more of service.

Craftsmen Convention Set

The 38th annual convention of the International Association of Printing House Craftsmen, Inc. will be held August 4-7 at Hotel Statler, Buffalo. A feature this year will be the "Craftsmen's College of Knowledge," a series of clinics. One of these, August 6, is titled "Letterpress Printer Adopts Offset."

A full program of technical and entertainment features has been scheduled, highlighted by a trip to Niagara Falls.

Complete Training at Donnelley

The lithographic department of R. R. Donnelley & Sons Co. was represented by six employees in the class of 28 who received diplomas for completion of the in-plant apprentice training program at a ceremony and dinner held recently at the Congress Hotel, Chicago. The new litho journeymen are Sylvester B. Brodzinski, Joseph L. Tubay, Joseph P. Benson, Glenn F. Chochola, William E. Gergel and Charles R. Johnson.

Gorr Urges Budget Reduction

Carl Gorr, head of the Carl Gorr Printing Co., Chicago combination plant, has been doing his part in the nationwide drive to stimulate a public protest against the national budget which he considers to be too high, and against waste of public funds at all levels of government. To help out the "Write your Congressman" campaign, Mr. Gorr published a booklet giving names, addresses and other data, including salaries, of all Illinois members of Congress. To round off his efforts he also included names of state and county officials and Chicago politicians down to ward committeemen. And the word he gets, Mr. Gorr said, is that people everywhere are making good use of his list.

Thomson Lithoplate Incorporates

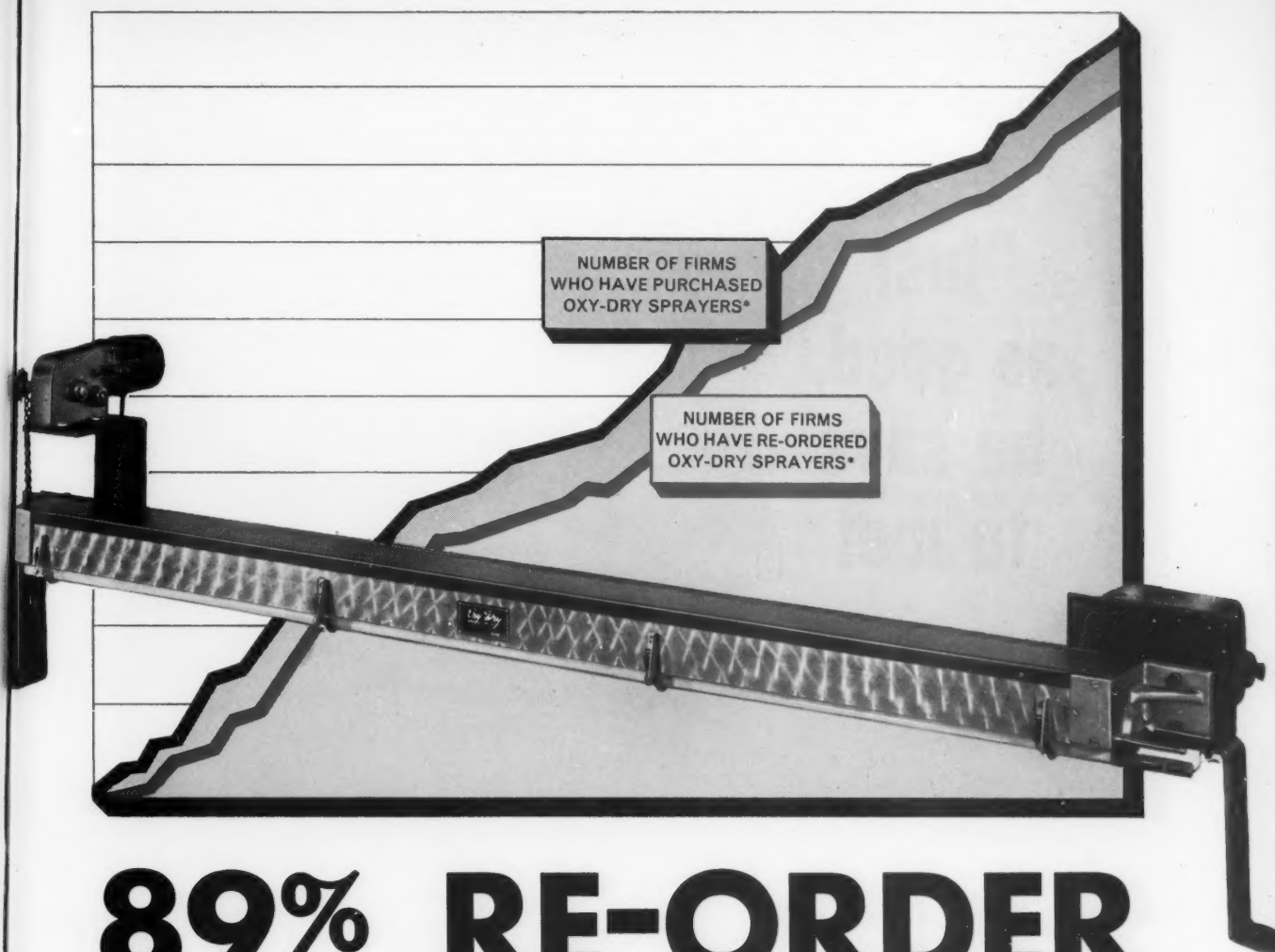
Thomson Lithoplate of Palo Alto, Cal., is expanding its facilities and has incorporated. A 31" Robertson Comet has been added in the camera department and other equipment additions are planned. Verle Thomson is president of the corporation. William Chandler, who heads production, is vice president.

Sun Elects Krinsky To Board

Stuart Z. Krinsky has been elected to the board of directors of Sun Chemical Corp. The election followed a vote to increase the number of directors from 10 to 11, which was taken during a regular board meeting held last month. Mr. Krinsky, who was assistant U.S. Attorney for the Southern District of New York from 1941 to 1945, will continue to serve as secretary of Sun.

Veteran Salesman Dies in Crash

Paul M. Nahmens, Chicago and midwest sales representative for the Craftsman Line-up Table Corp., Waltham, Mass., died in an automobile accident May 5 in Evanston, Ill. Prior to joining Craftsman, Mr. Nahmens had been associated with Monotype Corp. and the Addressograph Corp.



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J. B. Smith Honored

A long-time member of the lithographic industry, prominently connected with many trade associations,



J. B. Smith

last month was honored with a retirement dinner at the Advertising Club in New York.

The man, J. B. Smith Jr., known in the trade as "JB", has retired after 35 years in the industry. He started as office manager of Eastern Printing Co. in 1922 after graduation from Cornell University. He was promoted to vice president of the company in 1954.

His other activities included serving as president of the New York Photo-Lithographers Association for several years, as a director of the Metropolitan Lithographers Association and as a director of the National Association of Photo-Lithographers.

He also is active in the Masonic fraternity, and has received many honors from that organization.

Approaching his seventieth birthday, Mr. Smith lives in retirement at 104 Doncaster Road, Malverne, N. Y.

Shaw Heads Western

John Shaw, executive vice president and general manager of the Western Lithograph Co., was elected president of the firm May 17 at the annual stockholders meeting. He succeeds Charles Ward, president of Brown & Bigelow, who assumed the chairmanship of the Western Lithograph Co.

Mr. Shaw came to Western three years ago as a salesman and moved up quickly to vice-president and general sales manager. For the last two years

he has held the office of executive vice-president and general manager.

The board of directors also elected Charles Stowell as controller and Charles C. Bohrer, general superintendent. Other officers and directors re-elected were John B. Overall, vice president and general sales manager; F. A. Miller, vice-president of manufacturing; R. W. Sauber, secretary-treasurer; Maury Engle, vice-president of Westline Products Division, and H. R. Weber, vice-president of Creative Point of Sale Division.

L. A. PIA Honors Members

More than 100 employees of 23 graphic arts firms, all members of Printing Industries Assn. of Los Angeles Inc., received certificates of craftsmanship at the sixth annual master printer section banquet at the Biltmore. The master printers section is one of the 13 divisions of PIA. O. T. Hamilton, Burbank printing executive, is president of the group.

Turns To Trade Work

Ritterskamp Press, Inc., St. Louis, has switched from commercial accounts of their own to strictly offset trade shop, from camera, platemaking and press work on through the bindery work. Calvin A. Jack, treasurer of the company, who made the announcement, said it is the only union offset trade shop that can handle the entire job, in the city. They do both black and white and multi-color work for other St. Louis printers.

Beginning June 1 the company will send out a series of eight direct mailing pieces, all done offset, to promote its services to printers within a 200 mile radius of St. Louis.

Stuart In Purchasing Post

Appointment of Nick H. Stuart as director of purchasing was announced by Harry Hoffman & Sons Printing, printers and lithographers, Buffalo. Mr. Stuart was purchasing agent for Victor Wagner & Son Inc. for the past five years. Prior to that he was purchasing agent for the Printing and Bindery Division of Remington Rand, Inc., Tonawanda, N. Y.



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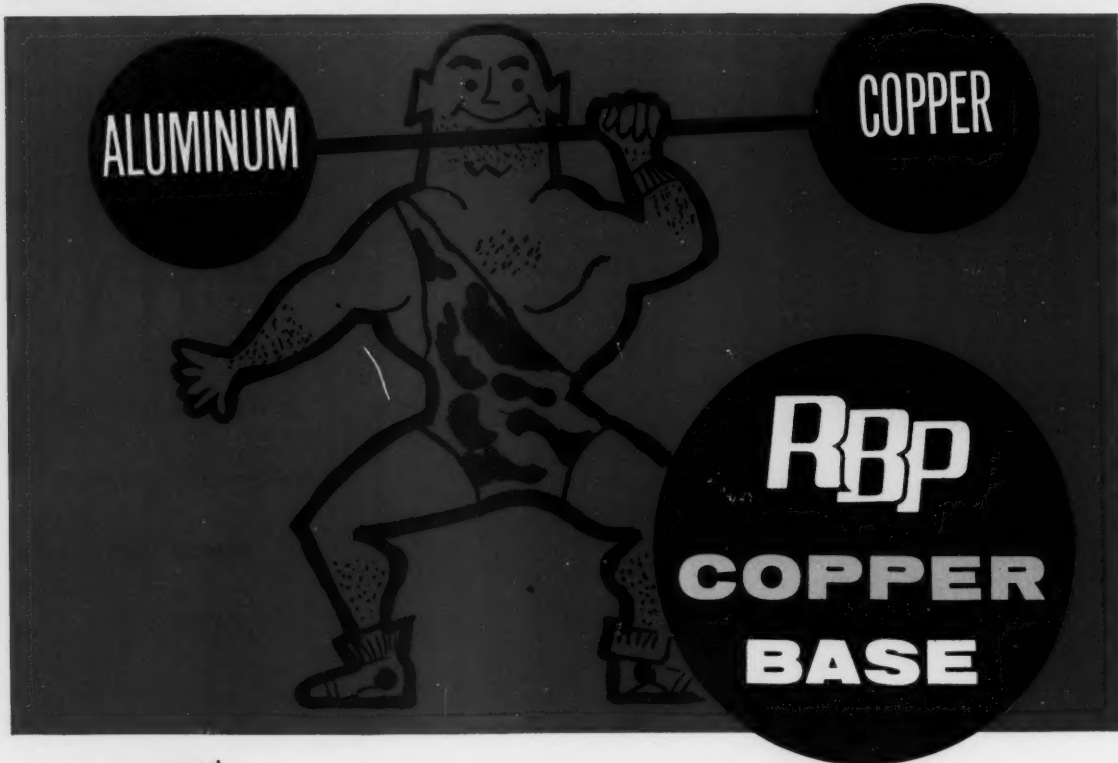
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CLEVELAND LITHO GRAINING & SUPPLY CO., 1211 Carnegie Avenue, Cleveland 15, Ohio • MIDLAND CAMERA SUPPLY CO., 1300 Grand Avenue, Kansas City, Missouri • O. N. OLSEN PHOTOGRAPHIC SUPPLIES, 139 East 5th St., St. Paul 1, Minn.; 325 E. 15th St., Minneapolis, Minn. • JOHN STARK LABORATORIES, Pearl Street, South Hadley, Mass. • SURE DOT LITHO SUPPLY, INC., 1636 West Van Buren Street, Chicago 12, Illinois • WESTERN LITHO PLATE & SUPPLY CO., 1927 South 3rd Street, St. Louis 4, Missouri • WILLY'S PLATE GRAINING CORP., 34-12 Tenth Street, Long Island City 6, New York.

LNA Sixth Awards Winners To Be Shown Overseas

Abbott Washburn, left, deputy director of the U. S. Information Agency, inspects LNA award-winning specimens with J. Louis Landenberger, LNA treasurer. The U.S.I.A. will exhibit winners of the sixth (1956) Awards Competition overseas.



The U. S. Information Agency will show overseas an exhibit of some of the finest printing produced in the U. S. Scheduled for its first showing in Bonn, Germany, after which it will tour that country, the exhibit consists of prize-winning entries in the Sixth Lithographic Awards competition, sponsored by the Lithographers National Association. The exhibit, which has been shown extensively in the U. S., was turned over to Abbott Washburn, deputy director of U. S. I. A., by J. Louis Landenberger, treasurer of L. N. A.

250 Million Mothers' Day Cards

More than 30 million mothers received an estimated 250,000,000 Mothers' Day cards this year. Children honored their mothers by mailing this record number of greeting cards, according to market research statistics from the Rust Craft Greeting Card Co., Dedham, Mass.

"Average annual sales for the past five years exceeded 225,000,000 cards. This year the total was expected to top that by a considerable margin," said E. Wrightson Christo-

Mr. Landenberger said the exhibit "represents not only the finest quality of printing, but it also portrays the American way of life. The brochures and pamphlets in the exhibit portray, to a large degree, the economic life of the American people. The displays and point-of-purchase material are indicative of the influence that super markets have had on promotional activities and demonstrate more than words can tell the merchandising story which has been such a revolutionary factor in our lives during recent years."

pher, president of Rust Craft, one of the world's leading offset printing greeting card publishers.

Simultaneous Conventions Set

The Seventh Educational Graphic Arts Exposition, scheduled for Sept. 6-12, 1959 at New York's Coliseum, has persuaded several graphic arts organizations to tentatively schedule their annual conventions to coincide with the exposition. Included are the following organizations: International Association of Printing House Crafts-

men, Printing Industry of America, International Association of Electrotypers & Stereotypers, National Association of Label Manufacturers, International Graphic Arts Education Association, Education Council of the Graphic Arts Industry, National Printing Equipment Association, International Typographic Composition Association and International Printers Supply Salesmen's Guild. The Research & Engineering Council of the Graphic Arts Industry is arranging a one-day meeting during the exposition.

Institute Plans Graduation

Graduation ceremonies for the Chicago Lithographic Institute have been scheduled for June 22, at the school quarters, 1611 W. Adams St. A class of 118 students will be given certificates for completion of prescribed courses in all branches of the trade. Commencement orator will be W. F. Patterson, special assistant to the Secretary of Labor, Washington, D.C.

During the summer months the Chicago apprentice training school plans to continue special courses in the air conditioned building, Frank F. Oehme, executive director, announced. Installation of a much needed two-color, 22 x 34" Harris LTP offset press was completed in April, Mr. Oehme said. Also available for the training courses are a single color, Miehle 29" and an ATF Chief 22.

Crescent Names Hickey, Zinck

Crescent Ink and Color Co., Philadelphia, recently announced the appointments of two new divisional managers. Joseph E. Hickey, formerly vice president and general manager of Whitman Press, Inc., Camden, N.J., has been named divisional manager of lithographic inks. Arthur C. Zinck has joined the firm as divisional manager of metal decorating inks. Mr. Zinck has been associated with the metal lithography field since 1927 and in 1949 was appointed director of lithography for National Can Corp.'s metal decorating plants throughout the U.S.

Trade Events

International Association of Printing House Craftsmen, Inc., 38th annual convention, Hotel Statler, Buffalo, N. Y., Aug. 4-7.

National Association of Photo-Lithographers, 25th annual convention, Sept. 11-14, Chase Park-Plaza Hotel, St. Louis.

Canadian Lithographers' Association, 15th annual convention, Mont Tremblant Lodge, Mont Tremblant, Quebec, Sept. 22-26.

National Metal Decorators Association, 23rd annual convention, Oct. 21-23, Chicago.

Litho Schools

Canada—Ryerson Institute of Technology, School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.

Chicago—Chicago Lithographic Institute, 1611 W. Adams St., Chicago 12, Ill.

Cincinnati—Ohio Mechanics Institute, Cincinnati, Ohio.

Los Angeles—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.

Minneapolis—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.

Nashville—Southern School of Printing, 1514 South St., Nashville, Tenn.

New York—New York Trade School, Lithographic Department, 312 East 67 St., New York, N. Y.

Manhattan School of Printing, 72 Warren St., New York, N. Y.

Oklahoma—Oklahoma A & M Technical School, Graphic Arts Dept., Okmulgee, Okla.

Rochester—Rochester Institute of Technology, Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.

Philadelphia—Murrell Dobbins Vocational School, 22nd and Lehigh, Philadelphia, Pa.

Pittsburgh—Carnegie Institute of Technology, School of Printing Management, Pittsburgh.

San Francisco—City College of San Francisco, Ocean and Phelan Aves., Graphic Arts Department.

St. Louis—David Ranken, Jr., School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.

Vancouver—Clark College.

West Virginia—W. Va. Institute of Technology, Montgomery, W. Va.

Trade Directory

Lithographic Tech. Foundation

Wade E. Griswold, Exec. Dir.
131 East 39th St., New York 16, N. Y.

National Assn. of Photo-Lithographers
Walter E. Soderstrom, Exec. V.P.
317 West 45th St., New York 36, N. Y.

Lithographers National Association
W. Floyd Maxwell Exec. Dir.
381 Fourth Ave., New York 16, N. Y.

National Assn. of Litho Clubs
Frank H. Mortimer, Secy.
5917 33rd St., N. W.
Washington 15, D. C.

Printing Industry of America
Bernard J. Taymans, Mgr.
5728 Connecticut Ave., N.W., Washington, D.C.

Internatl. Assn. Ptg. House Craftsmen
P. E. Oldt, Exec. Sec'y.
307 E. Fourth St., Cincinnati 2.

New York Trade School Conducts 76th Graduation



Principals at the 76th annual evening school graduation exercises of New York Trade School, held last month, at which 32 lithographic apprentices received certificates. *Left to right*, Enders Voorhees, president of the board of trustees of the school; Howard Glassman, Local 1, ALA; George E. McLaughlin, school superintendent; Ronald B. Smith, trustee; Ralph D. Cole, committee chairman; Gilbert C. Weaver, trustee; Don Cole, Herst Lithographing Co.; Walter E. Soderstrom, executive vice president of the National Association of Photo-Lithographers; Bernard Rosenstadt, president of Ardlée Service; and Frank Casino, Jr., Local 1, A.L.A.

THE New York Trade School held its 76th evening school graduation exercises May 15, at which 32 lithographic apprentices received certificates. Special awards were presented to the following: John MacKovich, Harold deHaan, Kenneth Ahrweiler, and Alex Calabrese, Jr.

The work of the school is carried on with the advice and cooperation of a joint industry advisory committee composed of members of Local 1, ALA, and lithographic employers of New York. Committee members of the employer group are Ralph Cole, chairman of the committee and president of Consolidated Litho Corp.; George Schlegel III, president of Schlegel Litho Corp.; Bernard Rosenstadt, president of Ardlée Service; and William A. Westphal of Metal Litho Corp.

Western N. Y. PIA Elects

George I. Heffernan was elected president of the Printing Industries Association of Western New York at a recent meeting of the board of directors. Other new officers are Albert L. Kolb, treasurer, and Penn Watson, Jr., secretary. Max B. E. Clarkson was named as the second member of the P.I.A. board of directors representing the Western New York area.

The new officers were installed at the final meeting of the season at Hotel Lafayette, Buffalo, which was addressed by the Hon. Raymond J. Blattenberger, Public Printer.

Pennington Heads Merrick Co.

Robert B. Pennington, Jr., vice president and general manager of Merrick Lithograph Co., Cleveland, was elected chairman of the board and president of the firm at a recent meeting of the board of directors. He succeeds Frederick A. Merrick who was president while the firm was a subsidiary of A. S. Gilman, Inc. A group headed by Mr. Pennington has purchased the company.

Other officers elected at the board meeting were Harold R. Johnson, vice president; Thomas O. Moles, vice president in charge of sales; John J. Greene, vice president and Detroit district manager; and Edward Ginsberg, secretary-treasurer.

Merrick is one of the fastest growing producers of lithography and designers of point-of-purchase materials in the midwest. Gross annual sales have increased from \$350,000 in 1952 to more than \$2,000,000 in 1956.

Coffey, Mule Elected

Eastern Printing Corp. and Photo Reproduction Corp., affiliated New York companies, recently announced the election of John F. Coffey as secretary of Photo Reproduction and Michael J. Mule, secretary of Eastern. Both men have been with the firms since 1946. Mr. Mule was appointed general sales manager of both companies in July, 1956. Mr. Coffey, manager of both companies, is a member of the board of directors of New York Litho Club.

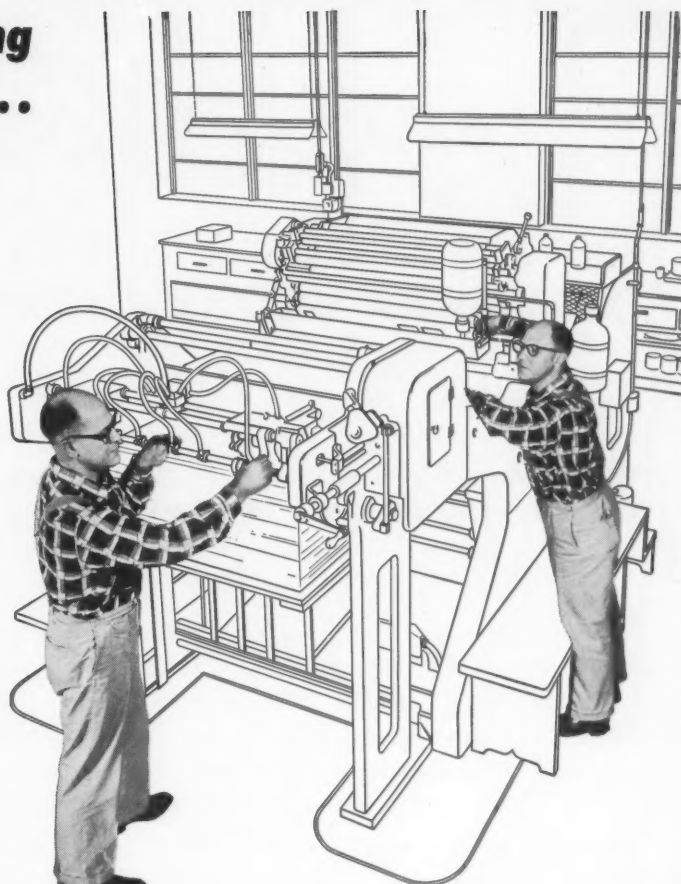
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Fast running **BOND**

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When you print Whippet papers, your pressman
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Four fast-running, low-cost papers for business office and direct mail use

YOU CAN EXPECT trouble-free press operation and customer-pleasing jobs when you run Whippet papers. Made by Hammermill, to uniform performance standards, these low-priced, unwatermarked papers have the uniform bulk and surface that keeps presses running smoothly. And, Whippet papers are outstandingly clean—a cleanliness usually found only in higher-priced papers.

Use *Whippet Bond* for business forms, for sales and advertising literature—for any printed job which calls for unwatermarked bond paper. White and six attractive colors, lint-free surface. Attractive brightness, satisfactory opacity. Good typing, writing and erasing surface.

Use *Whippet Ledger* for accounting department forms where paper costs must be kept down. Made for fast, trouble-free printing and ruling. Strong, durable. Posting finish for

machine bookkeeping. Takes neat pen and ink entries, too. Outstandingly clean. Choice of white, buff, green tint.

Use *Whippet Mimeograph* and *Whippet Duplicator* for the production of sales bulletins, price lists, news releases and other printed mastheads that your customers will fill-in on their office duplicating equipment. Both grades will run smoothly over your presses—and produce clean, bright office duplicated copies.

All Whippet papers come in weather-tight ream wrappers to protect their balanced moisture content. Sturdy, easy-to-use, shelf-service cartons provide easy storage and handling.

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Re-orders


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17 LITHOPRINT

SPEAK LOUDER THAN WORDS



**"WENT OFFSET" WITH A LITHOPRINT...
NOW IT TAKES TWO AT IMPERIAL!**

Typical of the many progressive and growing job shops in the country, the Imperial Printing Company, St. Joseph, Mich. "went offset" several months ago with their first litho press installation...a Miehle 17 Lithoprint. Fast get-away and changeover, simplified operating features, and the ability to handle 8½ x 11" forms, two-up at speeds up to 5000 per hour were the reasons for Imperial's choice. And it wasn't long before they realized their volume of offset work was steadily increasing...was consistently profitable.

Staying with a winner, Imperial installed a *second* Miehle 17. Now with two Lithoprints and a battery of Verticals, this combination shop is giving their customers the service and quality that stimulate growth and success. A great many shops have "gone offset" with a Lithoprint—many now operate two or more. There must be a reason for these reorders...find out what it is.

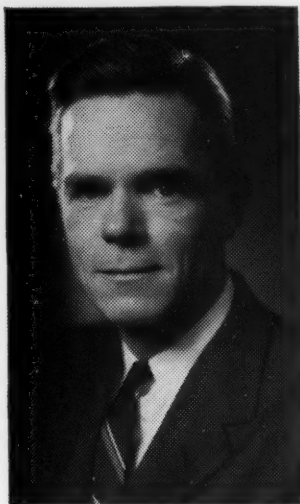
Write for complete details and demonstration arrangements.

MIEHLE PRINTING PRESS AND MFG. CO.
Division of Miehle-Goss-Dexter, Inc.
Chicago, Illinois



Northwest Elects Kendall

The board of directors of The Northwest Paper Co., Cloquet, Minn., has elected Harry T. Kendall, Jr., as



H. T. Kendall

president of the firm. Stuart B. Copeland, who has been president for the past 21 years, retired.

Mr. Kendall joined Northwest in 1938 and was elected vice president in 1948, executive vice president in 1954 and a director in 1955. Mr. Copeland was elected a director and president in 1936. Prior to his association with Northwest, he had been vice president and general manager of Eastern Manufacturing Co., now Eastern Corp., Bangor, Me.

Lord Baltimore Tops in Safety

Lord Baltimore Press, Baltimore, Md., captured first place in the 1956 contest sponsored by the National Safety Council's printing and publishing section to stimulate interest in accident prevention in printing plants.

In a belated report on contest results, it was revealed that the Baltimore litho firm had only 1.3 reportable injuries per million man hours worked during all of 1956. For the 21 firms falling into the "Group A" class under contest rules, the frequency rate ranged from Lord Baltimore's very low figure to an alarming 23.88 for the low firm on the "totem pole," while the average for all 21 was 6.57

Second place in Group A went to another litho firm, Standard Register Co., Dayton, whose frequency rate was 1.52. Third place was taken by the Army Map Service, Corps of Engineers, Washington, D.C., with their frequency record showing of 1.59 reportable injuries.

Three other litho companies, Reynolds & Reynolds, Dayton, The Todd Co., Rochester, and the St. Charles, Ill. plant of U.S. Printing & Lithograph Co., received special certificates for the showing they each made in reducing their 1956 frequency rate from their 1955 ratings.

Venture Into Offset

Rapid Press, organized in Chicago two years ago as a letterpress firm, took its first step into offset with the installation in March of a Harris 17½ x 22½" single color press.

A Robertson camera and a Robertson "Dial-A-Plate" platemaking machine also have been put in, George Korecky, senior partner, said. The addition of offset facilities, he declared, was "an effort to keep in touch with the times," enabling the company to supply the kind of printing most in demand. Letterpress operations will be continued, he added.

"The way people talk about the difficulties of the offset process," he remarked, "made me hesitate about getting into offset. But as it has worked out, I have found it a very simple process, once you catch on. We're specializing in direct mail and brochures, and the improved quality of the work has been very warmly approved by our customers."

Mr. Korecky formerly was part owner of the Atlantic Press, but disposed of his interests there when he decided to open a shop on his own. His partner in the new venture is a relative, Miss Virginia Buckland, who attends to front office business. Rapid Press occupies 4,500 sq. ft. of space at 3934 W. Armitage St.

Two Appointments at Ideal

Ideal Roller & Mfg. Co., Chicago, last month announced two new sales representatives in its eastern districts. Robert Thompson has joined the

sales department of the eastern branch of Ideal in Long Island City, N.Y. Mr. Thompson was associated with National Cash Register Co. as a salesman for five years. Prior to that he was with Jomac, Inc.

A. F. Shaw has been named to the sales staff of Ideal's New England district. He will replace J. J. Aylmer. Mr. Shaw previously sold graphic arts supplies in New England and upper New York state.

General Expands Facilities

General Offset Co., Chicago, has expanded production facilities by the addition of a Harris 23 x 36" single color offset press to the Harris LTC press with which they started business two years ago. The business has grown so rapidly, said Emil German-sky, senior partner, that the second press became an urgent necessity. Platemaking and bindery work are, for the present, being done by outside trade shops, he said. Both Mr. Germansky and his partner, Donald Cahill, were formerly with American Offset Corp.

Miller at International Fair

Miller Printing Machinery Co., Pittsburgh, will be represented at the International Graphic Arts Exhibition to be held June 1-16 in Lausanne, Switzerland.

Among their equipment to be exhibited at this fair will be a 27 x 41" Miller TY two-color press; a 21 x 28" Miller TW two-color press; and a 27 x 41" Miller SY single-color press. All these machines will be exhibited at the Graphic 57 Exhibition at stands Nos. 1401-1402 in Hall 14, in the name of Miller Druckmaschinen A.G. Zug/Switzerland.

Rovengo In Laurel Post

Laurel Process Co., Inc., New York, last month appointed Donald Rovegno as production manager. Mr. Rovegno, the immediate past president of New York Litho Club, has been in the lithographic industry for 25 years. He previously was associated with U. S. Printing and Lithograph Co., Sweeney Lithograph Co., Inc. and Multi-Color Lithographers, Inc.

POPAI Draws 15,000 To Chicago For Annual Symposium

THE Point-of-Purchase Advertising Institute's 11th annual symposium and trade show drew some 15,000 sales and advertising executives and a blue ribbon list of lithographers and suppliers to Chicago, April 10-12, to discuss mutual problems and lay plans for the year ahead.

A survey made by the Institute just prior to the convention indicated an estimated gross sales volume of point-of-purchase materials of \$800 million during 1956. So, for 1957, the mark to shoot at was set at \$1 billion.

How to harness the power of this advertising medium more effectively was the theme of various conference sessions. Planning a program, selection of the most effective material, the part it should play in the overall marketing picture, the place of permanent displays and kindred topics were among the problems examined by experienced and authoritative leaders in the industry.

In an examination of "trends" Walter J. Ash, vice president and sales manager of Consolidated Lithographing Co., Carle Place, L. I., declared that "Beyond any doubt more and more industries are calling upon point-of-sale materials to assist their sales picture. As a result, we find that retailers, having more display matter to choose from, become increasingly selective. Preference will automatically be accorded to more interesting art and construction; more ingenious use of available display space; more impelling sales motivation."

E. Leslie Wathen, division manager, Strobbridge Lithographing Co., Cincinnati, pointed out that the trend is definitely toward two types of displays that actually create more sales. One of these, the sales display, he said, "enables the salesman or even the consumer, himself, to demonstrate with mechanical devices the main features of the sales story. The other, the merchandiser type, is the kind most in demand today because it puts the merchandise itself and the sales story together in the best position to create the sales impulse and the actual sale at the same time."

Charlotte Montgomery, noted news-

paper and magazine writer, and the first woman ever to address the Institute, added another thought in her luncheon address.

"How many of you," she asked, "have women whom you consult when you are preparing material? To me it seems that women are brought in too little and too late." She told of talking with "a gal from Milwaukee," who worked for a company that makes paper napkins.

"They're beautiful napkins," this girl said to Mrs. Montgomery, "but the colors are awful. Our company plans a whole year's program and starts production. Then they come around and ask us women what we think of the new design. When we ask them why they picked those colors they want to know what's the matter with them. And, of course, they had never stopped to study the shades of blue, pink or yellow they had used."

Donald S. Hutchinson, vice president, Lutz & Sheinkman, New York lithographers, was re-named chairman of the board, and Stanley L. Wessel, president, Stanley Wessel & Co., Chicago litho firm, was re-elected president of POPAI for the 1957-58 term.

Among the 25 members of the board are the following litho firm executives: John W. Webb, president, Magill-Weinsheimer Co., Chicago; Robert J. Leander, vice president, Chicago Show Printing Co.; James T. Igoe, Jr., president, Inland Lithograph Co., Chicago; Walter J. Ash, vice president, Consolidated Lithographing Co., Carle Place, N. Y.; Paul Godell, director P-O-P display div., Gugler Lithographic Co., Chicago; Ray Dubrowin, director P-O-P merchandising, U. S. Printing & Lithograph Co., New York; and Chester Thomson, vice president, Einson-Freeman Co., Long Island City, N. Y.

Lithographers participating in the show included the following: Chicago Show Printing Co., Chicago; Consolidated Lithographing Corp., Carle Place, N. Y.; Einson-Freeman Co., Long Island City, N. Y.; Forbes Lithograph Mfg. Co., Boston; Gugler Lithographic Co., Milwaukee; Indus-

trial Lithographic Co., New York; Inland Lithograph Co., Chicago; Kindred MacLean & Co., New York; Lutz & Sheinkman, New York; Magill-Weinsheimer Co., Chicago; Merrick Lithograph Co., Cleveland; Phelps Mfg. Co., Terre Haute, Ind.; Schmidt Lithograph Co., San Francisco; Snyder & Black, New York; Standard Printing Co., Hannibal, Mo.; U. S. Printing & Lithograph Co., Cincinnati.

More than a score of other litho firms, which are members of POPAI, had representatives present, but made no displays at the show.★

Ozalid Plans New Plant

Plans for the construction of a new \$ million West Coast plant to manufacture sensitized materials for the Ozalid Division of General Aniline & Film Corp. were announced May 16 by John Hildring, president.

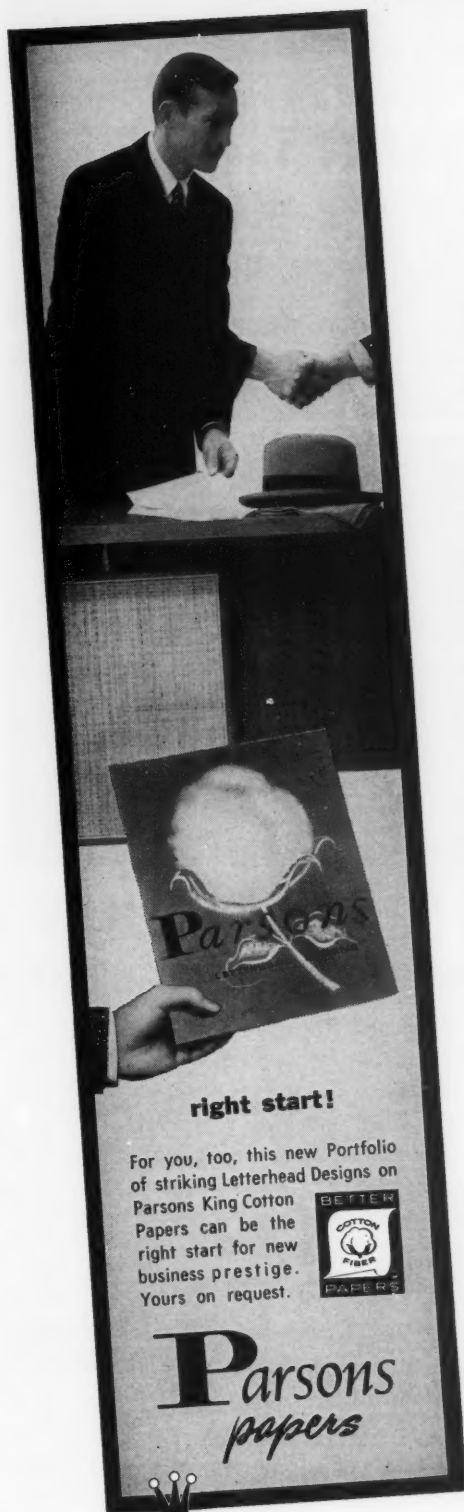
The plant, which also will provide warehousing and distribution facilities, will be erected on an 11-acre site at La Habra on the outskirts of Los Angeles. According to Walter A. Hensel, vice president of the corporation and general manager of the Ozalid Division, construction will start immediately. The new plant, he said, will serve 11 western states and part of Texas, Alaska, Western Canada and Hawaii.

Jomac Elects Eldridge as V.P.

Howard E. Eldridge has been elected vice president in charge of sales and a director of Jomac Inc., Philadelphia. Mr. Eldridge joined Jomac in 1948. Previously he had been a product manager for National Gypsum Co., vice president and sales manager for F. W. Bear, Inc., and sales representative for Procter & Gamble Co.

GAA Sales Seminar

The Graphic Arts Association of St. Louis will sponsor a three day sales seminar under the direction of Charles LeBlanc, Research Institute of America, June 13-15. Frank C. Rauchenstein is chairman of the event.



right start!

For you, too, this new Portfolio of striking Letterhead Designs on Parsons King Cotton Papers can be the right start for new business prestige. Yours on request.



Parsons

papers



WRITE ON YOUR BUSINESS LETTERHEAD FOR THE NEW PORTFOLIO OF LETTERHEAD DESIGNS, NO. 11H, PARSONS PAPER CO., HOLYOKE, MASS. © PFCO 1957

Parsons Letterhead Portfolio can help you sell finer printing

For over 100 years, printers generally have recognized that their own business can be improved by printing on Parsons King Cotton Papers. These same printers tell us that Parsons helps them earn . . .

- Greater customer respect
- Larger profits on each job
- More repeat orders

When you stock and sell Parsons King Cotton Papers, you get full advantage of Parsons national advertising (one of the series shown at the left), backed up by effective sales helps. Parsons cotton fiber papers are competitively priced; completely uniform in color, surface and printing characteristics; and are stocked by a fine paper merchant in your area. When necessary, Parsons can fill orders from mill stocks on any item.

Parsons King Cotton Papers:

Cotton Content	Parsons Bonds
100%	} Old Hampden Bond
Extra No. 1	
100%	
75%	Parsons Bond
50%	Laconia Bond
25%	Edgemont Bond
	Heritage Bond
	Parsons Writing
100%	L'Envoi
	Parsons Parchment
100%	Parsons Diploma

Parsons

papers

Parsons Paper Company, Holyoke, Massachusetts

11H

Mail to
Parsons Paper Company
Holyoke, Massachusetts
Gentlemen:

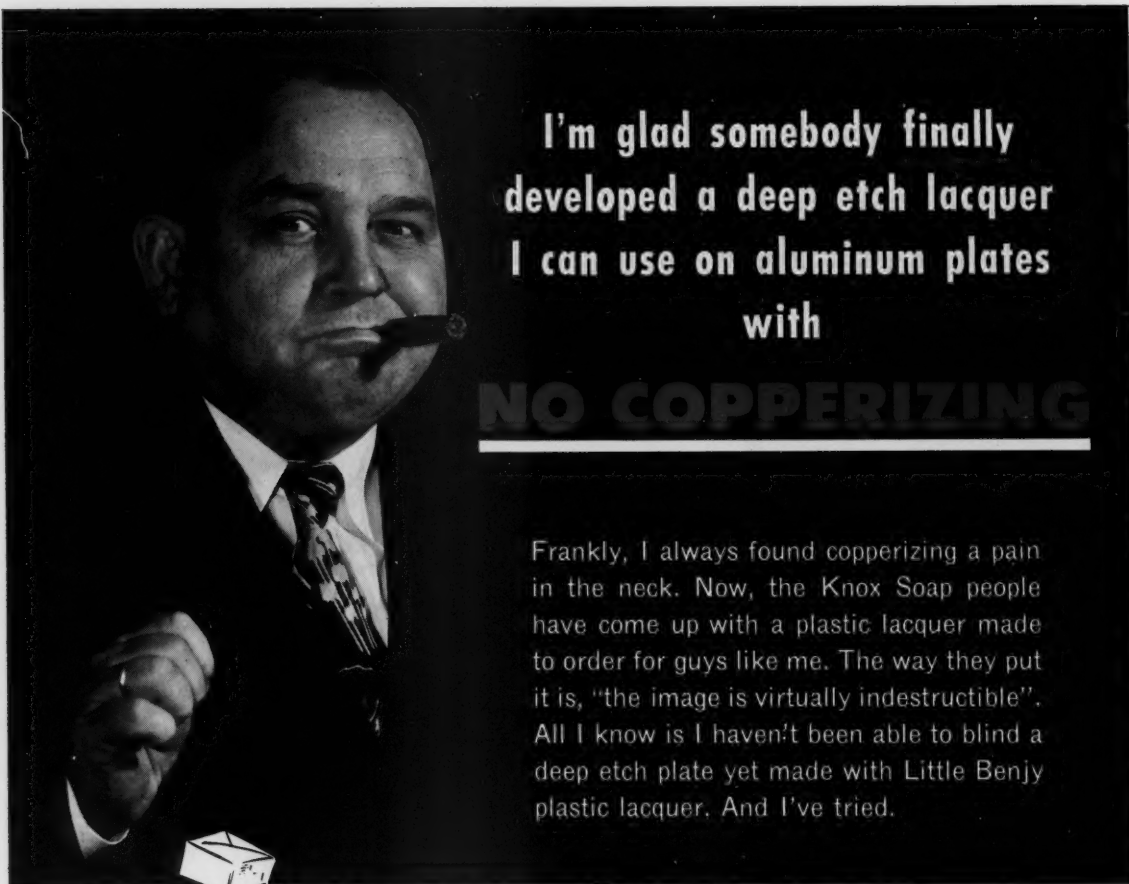
Please mail me a complimentary copy of your new *Portfolio of Letterhead Designs*.

Name _____

Company _____

Address _____

State _____ Position _____



I'm glad somebody finally
developed a deep etch lacquer
I can use on aluminum plates
with

NO COPPERIZING

Frankly, I always found copperizing a pain in the neck. Now, the Knox Soap people have come up with a plastic lacquer made to order for guys like me. The way they put it is, "the image is virtually indestructible". All I know is I haven't been able to blind a deep etch plate yet made with Little Benjy plastic lacquer. And I've tried.



LITTLE BENJY *Plastic* LACQUERS

PRINT SHARPER, RUN LONGER, NO BLINDING

Made in two types (for surface and deep etch plates) these revolutionary new formulas for lacquers exhibit unusually high bonding strengths. Ten to twenty times tougher than vinyls, Little Benjy produces a film of high flexibility, with a tremendous affinity for ink, and at the same time, an extremely high repellence to gum and water. These features, together with its self-leveling, smooth spreading ease of application make Little Benjy the lacquer that the industry has been searching for.

SEND FOR FREE FOLDER SHOWING ACTUAL TEST RUNS OR SEE YOUR LOCAL DISTRIBUTOR



KNOX SOAP COMPANY
3300-22 WEST CERMAK ROAD
CHICAGO 23, ILLINOIS

PLASTIC SURFACE LACQUER

PLASTIC DEEP ETCH LACQUER

PLASTIC DEEP ETCH LACQUER FOR PLATES 54" OR OVER

KNOX-OUT RINSE

KNOCK-DOWN AND DRAG-OUT

LITTLE BENJY 1 STEP WASH-UP SOLVENT

LITTLE BENJY CORRECTION FLUID

Offset Figures Prominently In "Top Honor" Books

OFFSET figured in production of more than one-third of the 64 books selected as "Top Honor" books for showing in the 8th annual exhibit of Chicago and midwestern book-making on display at the Chicago Public Library throughout May. The affair was sponsored by the Chicago Book Clinic, whose president is Richard De Bruin of Rand McNally & Co.

Six of the winners were printed offset by R. R. Donnelley & Sons Co., who also placed three others, printed by other processes, in the victory column. Other Chicago area lithographers whose work was represented by from one to three books, included Rand McNally & Co., Rayner Lithographing Co., Regensteiner Corp., Photopress, Inc., Manz Corp., H. L. Ruggles, Hilleson & Etten Co., D. F. Keller Co., and I. S. Berlin Press. Another offset volume was printed by Lord Baltimore Press, Baltimore. Several of the hard bound books were listed as having "covers by offset."

A total of 222 books were sub-

mitted for evaluation and under the scoring employed, 64 books from 72 publishers were ranked as "Top Honor" books of the midwest for 1956. Certificates of award were presented to each publisher and designer.

Edwin Snyder, quality control director for Rand McNally, drew attention to the work which university presses are doing to uphold high standards of fine book design. From such academic publishers came 26 of the "Top Honor" books, with the University of Oklahoma Press leading with seven winners. Mr. Snyder singled out one book, "Worship and Work," entered by Saint John's Abbe, Collegeville, Minn., whose cover design is a beautifully conceived and rendered piece of religious symbolism, lithographed on the cloth of a hard cover binding. Rand McNally's "Pioneer Atlas of the American West," whose trim size is 15"x21", also was notable in the exhibit for the lithographed cloth-on-board binding.★

Scranton Litho in Expansion

The expansion program of Scranton Lithographing Co., Scranton, Pa., centering around the firm's entry into a new field of book publishing and eventually resulting in an increase in employment, will be financed by an \$80,000 loan which the Small Business Administration announced has been approved.

Construction of a one-story addition of approximately 4,000 sq. ft. of floor space to the firm's present two-story plant now is nearing completion, and a number of new presses and platemaking equipment are "on order" in connection with the expansion program, it was disclosed by George Becker, president.

Lord Baltimore Names Gavigan

Richard N. Gavigan has been appointed manager of the new Los Angeles sales office of The Lord Baltimore Press of California. For the past four years Mr. Gavigan has been with the New York and Baltimore offices of the company.

Presensitized Plates Discussed

The Chicago Craftsman's Club devoted its April meeting to the timely subject of "The Presensitized Plate

and Its Effect on the Graphic Arts" with representatives of four leading manufacturers giving demonstrations and discussions of their various products. Ed Fritz, vice president, Azoplate Corp., presented the Enco positive and negative presensitized plate. Thos. J. Dunne, eastern manager, Lithoplate, Inc., spoke for the Harris Alum-O-Lith plate. H. M. Michelson, sales manager, printed products division, Minnesota Mining & Mfg. Co., explained the 3M plate. The Warren Foto-plate, which is a presensitized paper plate, was demonstrated by Chester A. Woods, Jr., midwest sales manager, of S. D. Warren Paper Co.'s photoplate division. Discussion of the effects of the presensitized plate was led by Dave Smith, sales manager, Chicago Litho Products Co.

Kindred, MacLean Elects V.P.

The election of Arthur Shadlen as vice president of Kindred, MacLean Division of Progress Lithographing Co., Inc., Long Island City, N.Y., has been announced by George C. Kindred, president. Mr. Shadlen joined the firm in April.

Prior to joining Kindred, MacLean, Mr. Shadlen was associated with the Regensteiner Corp., Chicago.



One copy of a new two-color 16-page "features book" on the Harris 14½ x 20½" offset job press will be produced from this sheet. The new booklet illustrates the "big press" features available for the first time in the 14½ x 20½" sheet size and describes its working elements. Also included are specifications and floor plan diagrams. Shown here examining the sheet are, left, E. M. Strand, pressman and Walter F. Trempler, general superintendent of Crane-Howard Lithograph Co., Cleveland.

Double Coated Offset at no extra cost!

ANOTHER GREAT CONSOLIDATED PAPER VALUE!

Without a cent of added cost, you can enjoy the superior offset performance you get only with double coating.

You get double coating advantage in every Consolidated grade. PRODUCTOLITH, CONSOLITH GLOSS and CONSOLITH OPAQUE are double coated on both sides in a single high-speed operation—right on the papermaking machine! There are no extra manufacturing steps—no extra cost.

You'll find double coating magnifies all the many fine performance qualities that leading lithographers have always liked in Consolidated Offset Enamels. See the difference the next time you're running a job. Just ask your Consolidated merchant for free trial sheets to compare with the offset paper you're now using. Check performance, results and costs. You'll agree, double coating

makes Consolidated Offset Enamels even greater values than before!

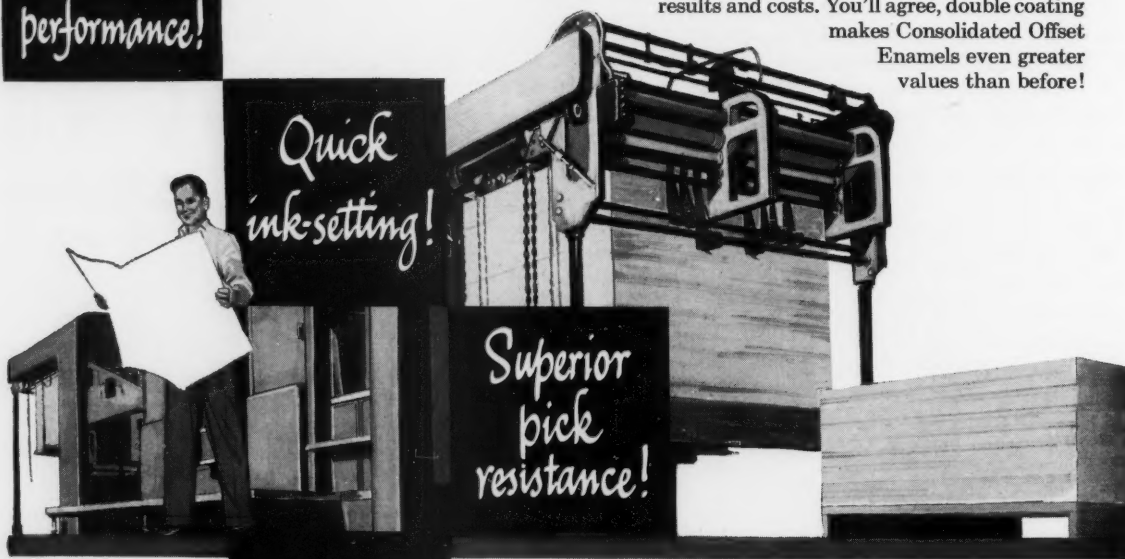
High
stability!

Trouble-free
press
performance!

Quick
ink-setting!

Superior
pick
resistance!

Brighter
color!



Consolidated

ENAMEL PRINTING PAPERS

a complete line for lithographic and letterpress printing
CONSOLIDATED WATER POWER AND PAPER COMPANY
SALES OFFICES: 135 S. LA SALLE ST. • CHICAGO 3, ILL.

Form Printing Ass'n

A group of 21 firms in Toledo, O. have joined together to form a new organization known as Printing Industry of Toledo, Inc. Purpose of the organization, which will be headed by R. F. Radke, Jr. of Rad-Mar Press, is "to better conditions in the graphic arts industry in Toledo." Member firms will be printers, lithographers, typesetters, binders, engravers and offset platemakers.

Other officers of the new group are Richard Edelin, 1st vice president; H. J. Kahl, 2nd vice president; John Richter, treasurer; and Hugh Bartley, Ted Paryski, James Tippet and Paul Steinberg, directors. Secretarial services for the new organization will be provided through the Chamber of Commerce of Toledo.

Firms joining the organization besides Rad-Mar include Kahl Brothers, Ohio Lithographing, Blade Printing, Superior Typesetting, J. R. Wright, Toledo Colortype, Hines Printing, Toledo Typesetting, Franklin Printing & Engraving, West Toledo Publishing, Graphic Engraving, Cannon Printing, Len Beach & Associates, Buettner & Breska, Toledo Ticket, S & S Masterlith and Bellman Bindery.

Norman Willets Burglary

An attempted burglary of the Norman Willets Co., photographic supply company in downtown Chicago, was broken up when an alert watchman in a building next door saw the thieves leaving the store. Shots fired by the watchman alerted a passing police squad who captured one of the two burglars. Later his partner was found hiding under a parked automobile. About \$400 worth of loot was recovered from the two men.

Manor House Expands

Manor House Printing has moved to new and larger quarters at 534 West Broadway, New York. The company has consolidated all of its departments into one-floor quarters, instead of widely separated units on three floors as formerly located.

Richard J. Zamor and Louis P. Nadasky, partners, said the firm will further develop its offset lithography

pressroom, bindery, addressing and mailing units. The company also will enlarge its creative department to specialize in advertising production and color lithography.

Gebhard in New 3M Post

Melvin L. Gebhard, formerly technical service manager for the printing products division of Minnesota Mining & Mfg. Co., has been named technical director of the research section of the printing products division. Mr. Gebhard has been with 3M since 1928.

Croplis Convention Chairman

Louis A. Croplis, New York manager of American Type Founders, is chairman of the annual convention of International Printers Supply Salesmen's Guild, which will be held Aug. 4-7 in Buffalo in conjunction with the annual convention of the International Association of Printing House Craftsmen.

Letterpress Abandoned

Chief Printing Co., Chicago, marked its 25th anniversary this year by deciding to abandon its previous letterpress operations and concentrating exclusively on lithographic production. F. L. Faulkner, general manager, "guessed it was for the same reason many others also have." Most of Chief's customers, he said, were asking for lithography and as there is every indication that this demand will continue to grow, it was decided to get rid of the letterpress department in its entirety. Liquidation of the unwanted equipment was under way last month. Among new offset equipment added to handle the expected increase in litho work was a 76", two-color Miehle press, the second of this model in use. Other offset presses include a 76", four-color, a 61", two-color and a 29" one-color, all made by Miehle.

Crocker Expands in East

A reorganization of the eastern sales operations of H. S. Crocker Co., Inc., San Francisco lithographers,



D. J. Scott

has been announced by R. J. Rodgers, vice president in charge of manufacturing-sales. The move combines the Baltimore and New York sales area and personnel under one central seaboard administration with headquarters in New York. Douglas J. Scott has been named regional manager to head the newly consolidated operations.

Under the new plan, sales operations of the company will be expanded to cover the East Coast from Maine to S. Carolina. Sales activities in New York and New England will be conducted as usual through the New York office. A new Crocker sales office has been opened in Philadelphia under the direction of Al Trice.

The consolidation is being carried out in conjunction with an expansion of the Crocker plant at Baltimore to provide for production of the firm's

Former P.I.A. President Dies

Robert H. Chaffee, president of the William G. Johnston Co., prominent Pittsburgh printing firm, and a former president of the Printing Industry of America, died April 13, as a result of an automobile accident near his home. His death, at age 55, marked the end of a brilliant career of civic and business leadership of particular prominence in the printing industry.



New officers of the Southern Graphic Arts Association are shown at recent convention in Mobile. Seated, l. to r., A. A. Wade, Knoxville, 1st vice president; J. Tom Morgan, Jr., Columbus, Ga., president; standing, l. to r., Harold W. Braun, Louisville, 2nd vice president; and Charles E. Kennedy, Nashville, secre-

tary. Picture at right shows Mr. Morgan, president of Litho-Krome Co., Columbus, receiving the Grand Award in the 18th annual exhibit of Southern Printing from Reuel D. Harmon, president of Printing Industry of America. Mr. Harmon presented awards certificates to all winners.

Speedy Press Installation

One of the fastest known press installations was completed recently by Forbes Lithograph Mfg. Co., Chelsea, Mass., when a 69" four-color offset press was dismantled and removed from the pressroom in two and one-half days. In its place, the Forbes engineering department, with Russ Snyder of Harris-Seybold Co. as erector, installed a Harris four-color 76" offset press.

The average time required for erection of one of these large presses is 35 days. Forbes had the press running in 17 days and four days later it was producing high-quality sheets. The production lapse from press to press was a total of 23½ calendar days. The project was coordinated by Joseph M. Simeone, plant engineer.

Plan Florida Color Center

International Color Corp., West Nyack, N. Y., announced last month that it will establish a large new color center on Rt. 1, north of Daytona Beach, Fla. The firm already has been incorporated there. The corporation has been licensed to use the Dexter Process of color which is employed in the making of natural color postcards.

Pending the completion of the

building in Daytona Beach, the firm will carry on its business and manufacturing operations at its present location at Rt. 303, W. Nyack. A branch office is located at 274 Madison Ave., New York.

Family Day At Brett

The cameramen, dot etchers, platemakers and pressmen of Brett Lithographing Co. made room for their wives and children May 11, when the men in the shop of the 113 year old Long Island City lithographer were hosts to their families and friends at the firm's first Family Day.

More than 650 guests, wives, parents, friends and about 125 children visited the plant for a tour of all the departments, in each of which was a demonstration on actual jobs of all the step-by-step lithographic processes.

The route of the tour took the guests through the camera, dot etching, stripping and platemaking departments, then to the press room where a Miehle 52 x 76 four-color press was in operation. Men were stationed in each department to demonstrate the work done there and to answer any questions. Refreshments were served at the conclusion of the tour.

Set-Up Paper Box Awards

Eighty-seven awards have been made in the 7th annual Set-Up Paper Box Competition, sponsored by the National Paper Box Manufacturers Association. All entries went on display and award certificates were formally presented to the winning box manufacturers at ceremonies during the Association's annual meeting and "Boxarama" exhibit in Miami Beach, May 1-5.

Selections were made from the equivalent of over 2,500 entries by a seven man panel of packaging, merchandising and design experts. Merchandising appeal was the foremost criterion for recognition in 24 different product categories, while additional awards were made to those boxes judged outstanding in construction, display and surface design.

GAA Group Elects Schunter

The Graphic Arts Association of Northern California, year-old organization for promotion of Printing Week, has re-elected as president, Herman Schunter of the printing department of W. P. Fuller & Co., San Francisco. Bob Franklin of the Ben Franklin Press has been named chairman for San Francisco's 1958 Printing Week activities.

no matter how you look at it...



- ✓ **GREATER SHEET STABILITY**
- ✓ **BETTER PRINTING SURFACE**
- ✓ **SMOOTH, UNIFORM GUMMING**
- ✓ **LIES FLAT, NO CURLING**

"the quality gummed paper you can always depend on!"

use **PERFECTION®**
FLAT GUMMED PAPER.

There is Nothing Finer !



Perfection is made by

PAPER MANUFACTURERS CO.

PHILADELPHIA 15, PENNSYLVANIA

SALES REPRESENTATIVES

Atlanta, Chicago, Cleveland, Kansas City,
New England, New York, Philadelphia,
Los Angeles.

Complete list of distributors in Walden's "Paper Catalog."

MODERN LITHOGRAPHY, June, 1957

**Profitable
DIE CUTTING!**

A troublesome service can be turned into a profitable operation with the PMC Die Cutting Machine. Many printers and lithographers have found new business opportunities in a wide variety of work requiring an efficient, economical die cutting operation.

Speed—ruggedly built and simple to adjust, the PMC Die Cutting Machine can handle up to 300,000 pieces per hour; **simplicity**—die can be locked into a registered position in the machine in a few minutes, change of jobs made quickly and easily; **versatility**—handles a wide range of label, round cornering and specialty work and is efficient for both, long and short runs.

Write for
additional
information.

PMC

The Printing Machinery Company

436 COMMERCIAL SQUARE
CINCINNATI 2, OHIO

Chicago Contract Signed

A two year contract with an \$8.75 wage increase has been signed by Local 4, ALA, and collective bargaining representatives of more than 165 companies engaged in lithographic printing throughout the Chicago area. The agreement, covering 4,600 employees, marked the end of seven weeks of bargaining. The two year settlement includes a wage increase breakdown of \$4.75 per week to all employees as of May 1, 1957, and an increase of \$4.00 per week to everyone, effective May 1, 1958.

Reliable Litho Service Opened

Reliable Litho Service has opened for business in Chicago to provide a platemaking and copy preparation service for lithographers. Located at 1402 W. Harrison St., the new company occupies 3,500 sq. ft. of space on two floors. Equipment includes a Robertson 36" camera and complete platemaking facilities. Partners in the business are John E. Pratt, Arthur F. Holpuch and Alfred Kovasky. For 23

years Mr. Pratt was production manager for Sheldon Printing Co. and his two partners were employed in the platemaking department there. Following the recent merger of Sheldon with the Sleepeck Litho Co., the trio launched their new enterprise in March.

Gibson Joins Chemco In Atlanta

J. E. Gibson has joined the sales staff of Chemco Photo-products Co., Glen Cove, N. Y., it was announced recently by S. B. Anson, Jr., general sales manager. Mr. Gibson will work out of Chemco's Atlanta office. Prior to joining Chemco, Mr. Gibson was associated with Thaxton and Simons Laboratories, Foote & Davies, Inc., and Lithoplate Inc., all of Atlanta.



Gibson

Production Conference Set

"Where We Are Headed in Offset Lithography, Letterpress and Gravure" is one of the many subjects which will be discussed at the Production Conference of Printing In-

dustry of America, June 27-28 at the Edgewater Beach Hotel, Chicago. Each process will be discussed separately for persons in each field and discussions will be conducted on a seminar basis. There also will be a special seminar for persons who are planning to go into offset.

Following the various sessions June 28, plant tours will be conducted at W. F. Hall Printing Co., Magill-Weinsheimer Co. and Rand-McNally & Co.

Smith-Edwards Expands

Smith-Edwards Co., printers and lithographers in Philadelphia since 1896, moved May 6 from its previous location at 1413 Vine St. to a new, one level plant at 22nd St. and Sedgley Ave., Philadelphia. According to Henry K. Lobel, president, the 40,000 sq. ft. building was required to house the new 35 x 45" Harris two-color press, two 54" single-color units, and a 56" gold bronzer, in addition to existing letterpress, offset and bindery equipment.

- Increase Printing Production
- Improve Quality

With the *Doyle* SHEET CLEANER

Patented



Accumulation of dirt from paper stock removed from the filter collector bag of a Doyle single Sheet Cleaner.

- The Doyle Sheet Cleaner removes dirt, dust, lint, loose edges and excess dry spray from the surface of the paper automatically as the sheet or web feeds into the press. Keeps forms clean, eliminates picking, filling up of halftones and linting on offset plates.

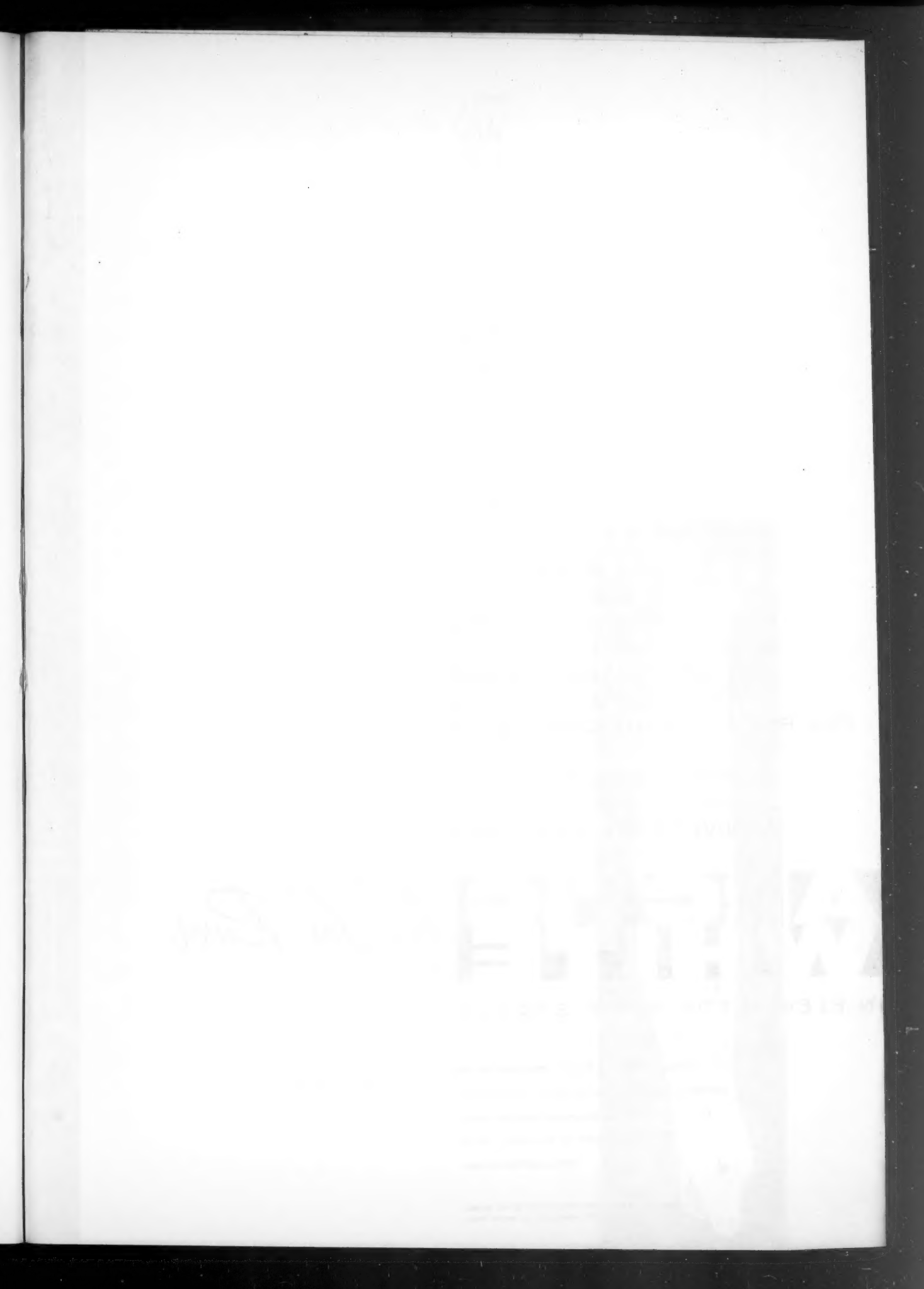
- Insures fast steady running, full production without stops for unnecessary washups while improving the quality of your work! Easily and quickly installed on any type of press. Lasts the life of your equipment. This profitable Cleaner is endorsed by leading companies everywhere. Write today for our Profit Producing Cleaner Bulletin.

J. E. Doyle COMPANY

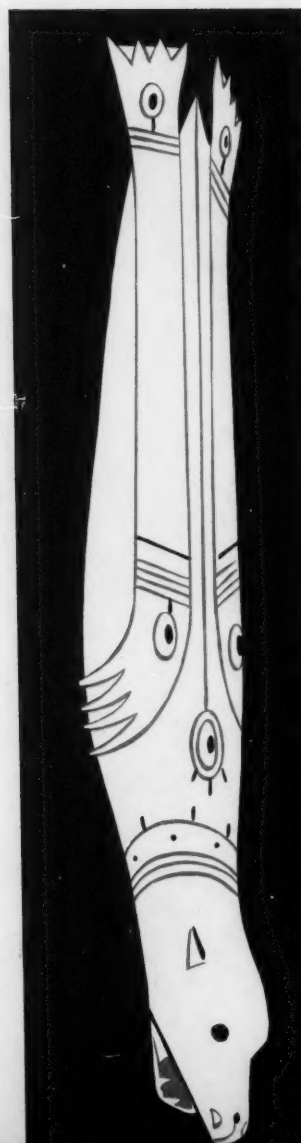
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Quality Control Equipment for the Printing Industry for 42 Years



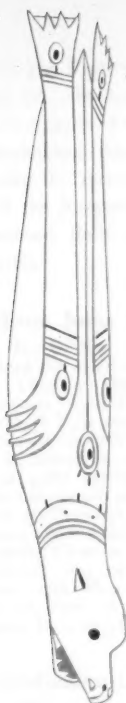
THERE'S NOTHING WHITER
THAN FOX RIVER
ARCTIC WHITE



FOX



IN EL



What's this?

A carved ivory seal . . .
one of many
charms which
adorn the winter
headgear of Alaskan
seal hunters.

Illustrated here by
Artist Ralph Jahnke,
this primitive
symbol, according
to legend, creates
a friendly bond
between the hunter
and his quarry . . .
and allows him
to stalk his game
without alarming it.

FOX RIVER BOND
FOX RIVER OPAQUE
ENGLISH BOND
NATIONAL BANK BOND
ANNIVERSARY BOND
FOX RIVER ONION SKIN
FOX RIVER OPAQUE ONION SKIN
ANNIVERSARY ONION SKIN
ANNIVERSARY VELLUM
ANNIVERSARY BRISTOL
ANNIVERSARY THIN CARD

ARCTIC

by Fox River

IN ELEVEN FOX RIVER GRADES

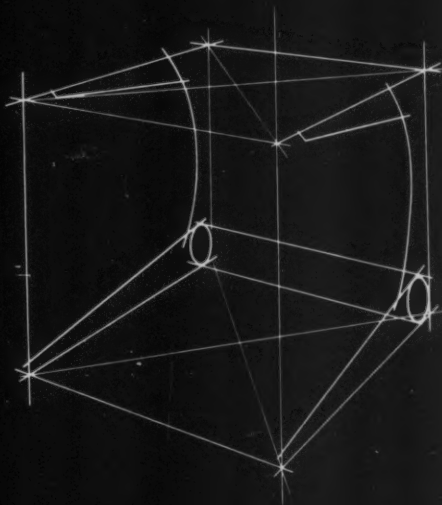
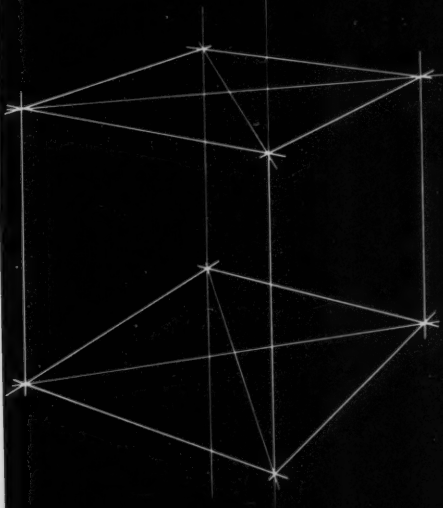
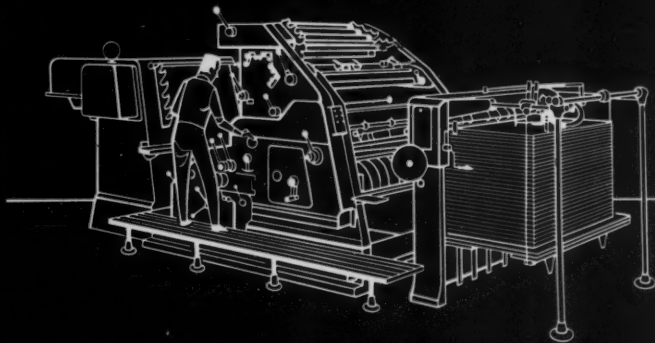
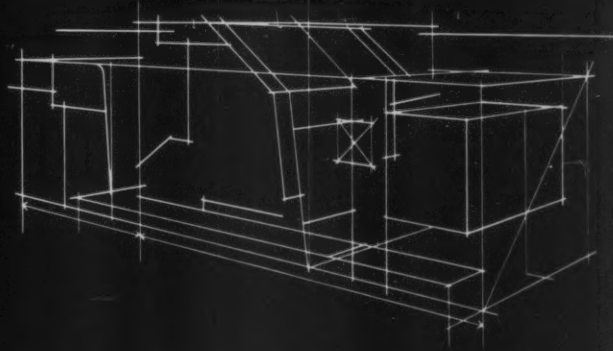
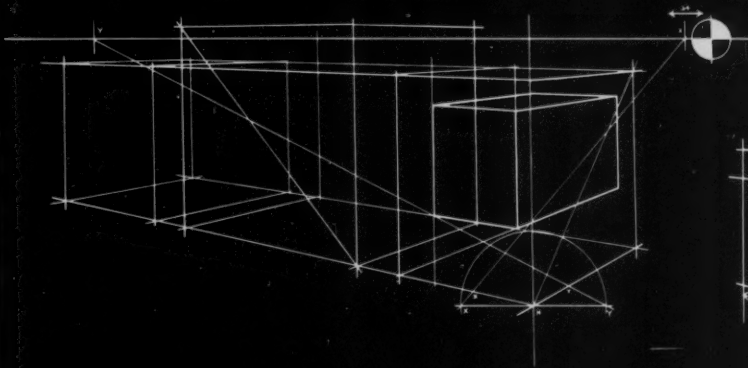
Arctic White is a bright, new color which
combines with the best in design and printing
to produce the most beautiful work.

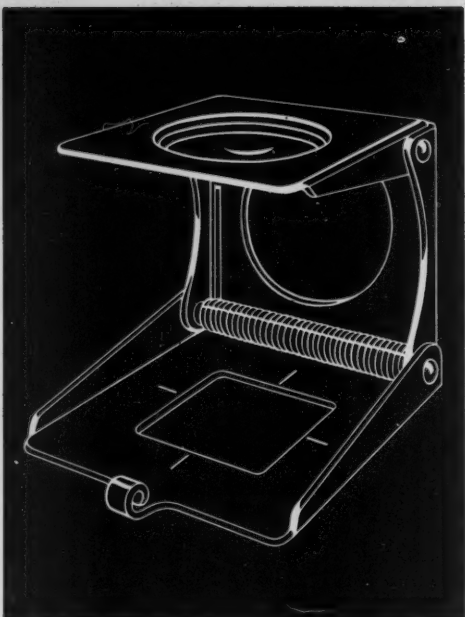
The finest papers for business, social
and advertising use.

Lithographed on ARCTIC WHITE FOX RIVER BOND,
25% cotton, sub. 20, cockle finish.



THESE NOTES
FOR ARCTIC
STATION 1000A





The job...
and the
pressman



This insert was lithographed by The Colwell Press, Inc., Minneapolis, Minnesota, on a 29" offset press. Pressman: Sid Dahl.

TRUE solids, finest details with perfectly-smooth 3M Plates!

Combine extremely delicate linework with large, unbroken solid areas and you've got a tough reproduction job—a job for 3M Plates.

In running this insert, the pressman found there was no line too fine for 3M Brand Photo Offset Plates—even on reverse printing. This is quality *you can match* because the flawless surface of 3M Plates makes microscopic perfection possible. The fact is: only a perfectly-smooth surface reproduces everything in the original negative faithfully. The finest lines remain clean and unbroken because there's no grain or uneven surface to help break them up or distort them.

Solids come through deep, rich, *perfect* because smooth-surfaced 3M Plates are chemically water receptive. Less ink and water are needed. The proper ink-water balance is easier to get and keep. Ink emulsification problems are virtually eliminated.

Make your next job a smoother, cleaner one—run the truly economical plates preferred by 8 out of 10 users of presensitized plates—the 3M Brand.



FREE! WORLD'S SMALLEST CALENDAR printed on a handsome self-standing easel card is free to you by writing: Minnesota Mining and Manufacturing Company, Dept. NJ-2, St. Paul 6, Minnesota.

Quality Lithography Depends on a Perfectly-Smooth Plate

3M Photo Offset Plates

BRAND



"3M" is a registered trademark of Minnesota Mining and Manufacturing Co., St. Paul 6, Minn. General Export: 99 Park Avenue, New York 16, N.Y. In Canada: P.O. Box 757, London, Ontario.



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AND
EQUIPMENT**

PRESENSITIZED PLATES

**WE GIVE YOU TECHNICAL HELP IN SOLVING YOUR PLATE
PROBLEMS AND NEEDS.**

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FOR MAKING YOUR OWN PLATES

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CHICAGO 10, ILLINOIS**



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PLATE MAKING
or
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OR DEEP ETCH UP TO AND INCLUDING 22x34 PRESSES**



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WE SHOOT—YOU RETOUCH

WE SHOOT AND RETOUCH

WE SHOOT—RETOUCH AND READY FOR YOUR PLATING



*Take Advantage of Our Staff of 20
Trained Personnel*



PROGRESSIVE LITHOPLATE & SUPPLY CO.
435 NORTH STATE STREET
CHICAGO 10, ILLINOIS

Stecher-Traung Appointments

Four Stecher-Traung Lithographing Corp. officers received new appointments at a directors' meeting recently in Rochester.

Leslie H. Jackson of San Francisco, former chairman of the board, was named honorary chairman. He was succeeded by Charles W. Weis, Jr. of Rochester, former president. Ralph J. Wrenn, also of San Francisco, former executive vice president, was appointed president. Named to take his place was Richard C. Alden of Rochester, former vice president.

Stockholders were informed 1956 was the best year in the history of the company, with gross earnings over \$14 million.

Brown & Bigelow Names Two

P. J. Sundberg and P. W. Atkinson, vice presidents of Brown & Bigelow, St. Paul, Minn., have been appointed assistant general sales managers. Mr. Sundberg has been with the firm since 1930 and was appointed vice president and sales manager of the home division in 1948. Mr. Atkinson, who joined the company in 1936, was Cleveland district manager and company sales promotion manager before his appointment as vice president and sales manager of the central division in 1949.

R. R. Donnelley Elects

R. R. Donnelley & Sons Co., Chicago, has elected William M. Angus and Nicholas J. Vander Kloot as senior vice presidents and advanced Harold M. Schwanbeck, Thomas Beers and Russel W. Thompson to vice presidential posts. Mr. Schwanbeck is director of the Chicago manufacturing division and the other four veteran employees are sales executives. Also announced by Charles C. Haffner, Jr., chairman and chief executive officer, was the appointment of Dale C. Allen as manager of general sales.

Frontier Type Service Formed

Formation of Frontier Type Service, Inc., Buffalo, which will serve printing concerns and advertising agencies throughout Erie County and in New York City, was announced

recently by Homer J. Savage, president, who also heads the Savage Litho Co., Inc., Buffalo. Other officers of Frontier Type Service are Edward C. Crangle, vice president and William W. Burns, secretary-treasurer.

Both Mr. Crangle and Mr. Burns will continue as vice presidents of Savage Litho. They have been with the firm since 1941. Mr. Savage has headed the company, which has a work force of approximately 100, for 35 years.

Sommers Speaks at Conference

Donald Sommers, vice president of Rudisill & Co., Lancaster, Pa., was one of the featured speakers at the recent fourth annual Conference on Printing Management Problems held at the Gunter Hotel, San Antonio. Mr. Sommers called attention to many of the reasons for the continued increases in the production costs of printing today. Increased labor demands, materials costs, taxes and other causes were discussed.



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toxic cleaners which are condemned
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SAFETY ENGINEERS

For safe, quick cleaning of
ACETATE, VINYL, POLYSTYRENE FILM,
GLASS, COLOR FILTERS, SCREENS, VAC-
UUM FRAMES, LENSES, ALL SURFACES
ON CAMERA, STRIPPING and ART
PREPARATION EQUIPMENT

use **FILM-KLEEN!**

Contains no harmful chemicals

Removes smudges, fingerprints, masking tape adhesive, dust, dirt, lint, spots

DRIES FAST—and leaves no oily film, no streaks, no clouds, no rings

REDUCES STATIC

Packed 1 gal.; 5 gal. cans and 55 gal. drums

Write Dept. F for FREE U. S. Dept. of Labor Booklet "Benzol Poisoning"

ANCHOR CHEMICAL CO., INC.

"SOLUTIONS FOR GRAPHIC ARTS PROBLEMS"

829 BERGEN ST., BROOKLYN 38, N.Y. MAin 2-8006





Four-unit, ATF web-fed offset press at Pacific Press, Inc., of Los Angeles. This equipment handles webs up to 35" in width at speeds of up to 20,000 cylinder revolutions per hour. It prints on both sides of the web

simultaneously (perfecting), delivering thousands of high-quality signatures per hour. It's equally efficient for black & white or color work ... can actually print 8 colors at once—4 colors on each side of the web.

why one ATF web-fed offset press leads to another...and another

The press illustrated was installed last summer. Pacific Press, Inc., of Los Angeles is sold on the speed, quality reproduction and folding versatility of their new ATF web-fed offset press. Their second press has now gone into operation at the plant of Phillips & Van Orden in San Francisco.

Pacific Press ordered these two new 4-unit, 8-color publication presses to better serve the need of our ever-expanding western economy. They both are producing single and multi-color, high-quality publication work. More and more publication printers throughout the country are becoming aware of the terrific record these ATF web-fed rotary offset perfecting presses are making in the publication field for top-quality,

high-volume, low-cost reproduction of sales manuals, advertising specialties, magazines, books, packaging materials, folders and newspapers.

Today, ATF offers publication printers:

- **Presses famous for quality work, simple operation, and fast changeovers.**
- **Low initial costs, thanks to the standardization of many components.**

Your ATF representative calls on a storehouse of practical experience that helps new users get into full swing as fast as possible. Call him today. Consult your local 'phone directory or contact American Type Founders, 200 Elmora Avenue, Elizabeth, New Jersey.

ATF

better, more profitable printing... from the most complete line of equipment

Workshop Attended by 1,400

With an attendance of 1,400 printers and lithographers, the four-day "Graphic Arts Workshop" conducted by the Harry W. Brintnall Co., San Francisco, proved to be one of the most successful equipment showings sponsored by a private firm in the graphic arts industry. From April 24 to 27, approximately 60 pieces of equipment were in constant operation.

First West Coast showings of the Robertson "480" and "Twinkle" cameras were conducted by Leonard Florshiem, Jr., president of Robertson Photo-mechanix, Inc., Chicago. Anderson Manufacturing Co.'s recently developed Color-Sep unit was put through a series of darkroom demonstrations by the firm's vice president, Bruce Hinsey. Craftsman Lineup Tables were shown by George H. Charnock, vice president and general manager of the manufacturing firm. W. A. Brown Mfg. Co., Chicago, showed its new sink, equipped with temperature control, film viewer and storage cabinet. Other equipment shown in action included nuArc and Macbeth arc lamps and the Mort Co.'s dampener-cleaner.

Some of the West Coast associations attending in a body included the East Bay Club of Printing House Craftsmen, Fresno Craftsmen, Stockton Craftsmen, the Peninsula Graphic Arts Association and the Sacramento Club of Printing House Craftsmen.

Printcraft Names Matteini

George Matteini, formerly sales promotion manager for Burlington Industries, Inc., has been named sales manager of Printcraft Press, Inc., New York. He will have complete charge of all sales activities for the offset and letterpress printers.

First Photon in New York

The first Photon typesetting machine to be acquired by a printing plant in the New York metropolitan area has been installed by Regency Thermographers. News of the installation was announced recently by Robert Gooding, Regency sales manager. Mr. Gooding said the electronically

operated machine is being used for the typography of wedding announcements and invitations produced by the firm. Set-up copy is printed offset and thermographed to gain the raised printing effect.

New M-G-D Office

Miehle-Goss-Dexter, Inc. recently announced the opening of new offices and salesrooms at 595 Wimbledon Rd., Atlanta, to be staffed by sales and service personnel of Miehle Printing Press and Manufacturing Co., Dexter Folder Co., and Goss Printing

Press Co., divisions of Miehle-Goss-Dexter.

Hillers Heads D. C. Group

John K. Hillers of Judd & Detweiler, Inc., Washington, D. C., has been elected president of the Washington Printing Guild. He succeeds David Porterfield, Jr. of Arrow Service. The Guild, which is an affiliate of the Graphic Arts Association of Washington, D. C., represents the young executives and salesmen in the commercial printing industry in the area.



A RECTIGRAPH® PHOTO-COPYING MACHINE Saves Time and Money in Preparing Layouts and Mechanicals

Speed your camera operations by assembling made-to-scale, clean, sharp, photocopies of lettering, type, charts and other line copy in your mechanicals. Photocopies of photos cropped to correct sizes in layouts also save operator's time. Extra photocopies of layouts help the art department and typographer to keep the jobs moving.

The Rectigraph Photo-Copying Machine copies anything written, printed, typed, drawn or photographed in same, enlarged or reduced size. Negative or positive prints up to 18" x 24".

Let a Haloid branch office representative explain how a Rectigraph Photo-Copying Machine will save you time and money.

THE HALOID COMPANY
DEPT. 57-44, ROCHESTER 3, NEW YORK
BRANCH OFFICES IN PRINCIPAL CITIES

HALOID

*"For fixing capacity
and speed... Hunt
FLASH-O-GRAPH Fixer
beats them all!"*

Reports like this come in almost daily from photographers who are fixing *more* film and *more* prints with Hunt FLASH-O-GRAPH Fixer than they've ever done with any other fixer.

They get fixing *speed* as well. With Hunt FLASH-O-GRAPH, photo-mechanical film clears in less than 20 seconds; commercial pan film in less than 50 seconds; and photo papers fix in less than 90 seconds.

There's an added reason too, which assures better *results*. We mean the convenience of controlling the hardening quality of both film and prints to suit your own conditions of temperature and humidity, by adding just the right amount of hardener from the separate bottles supplied in each carton.

Order a carton of FLASH-O-GRAPH today and prepare for a pleasant surprise. You can order direct from any Hunt Branch, or write for price list to Palisades Park, N. J.



NEW CONVENIENT PACKING

Each carton of Hunt FLASH-O-GRAPH Fixer contains four 1-gallon jugs of Fixer, four 12-ounce bottles of FLASH-O-GRAPH Hardener, and one measuring graduate.



PHILIP A. HUNT COMPANY

PALISADES PARK, N. J.

Chicago • Cleveland • Cambridge • Brooklyn • Atlanta • Dallas • Los Angeles • San Francisco

NALC

(Continued from Page 35)

pay the high price for dinner, but could afford to attend an after-dinner meeting.

There was a long discussion of methods of getting members to return questionnaires. One club has success with return postcards, another uses a telephone committee, and still a third offers a free drink before the meeting to persons who have returned properly filled out questionnaires. It was generally agreed, however, that there is no sure way to get a good return on questionnaires of this type.

Although the Thursday afternoon session was well attended by delegates, the convention was not formally opened until Friday morning when the group was welcomed to the city by William H. Sleepack, president of the Chicago Lithographers Association; Mr. Ludford, president of the Chicago Litho Club; and Mr. Morgan, convention chairman.

Committee chairmen were called upon by president Blattenberger to tell of their activities during the year. Reports were given on the editing and mailing of the NALC tip sheet, mailing of suppliers bulletins and technical information directly to members.

Potential Clubs

Mr. Morgan, as field organizer, reported that there are half a dozen potential members of NALC. Mr. Goebel, treasurer, reported that the association is in a much better financial situation than in recent years. President Blattenberger commented, however, that the association still has a treasury far too small to consider obtaining even a part-time executive secretary.

The budget committee of NALC suggested for the coming year expansion of activities to benefit individual members of local clubs by means of bigger mailings of the NALC tip sheet, and by continued advertising of the NALC in national trade magazines.

At the Friday afternoon session certificates of membership were given

to the Atlanta and the Columbus Litho Clubs, latest to join the national association.

In his luncheon address, Mr. Spence told about production of Navy publications by all printing processes. He said that the Department of Publications is seeking to utilize offset in a greater number of publications because it is quicker and cheaper than the other methods.

"For instance, in the Chicago area," he said, "we are taking action to get 100 percent production of Navy newspapers by commercial offset."

Navy Publications

At the present time approximately 37 of 144 Navy publications are being done offset. Letterpress is used in many instances only because of its availability at small town job shops in areas where a newspaper is needed, he added. Several awards have been won because of the excellence of the newspapers and publications put out by offset, Mr. Spence stated.

He also told about an interesting operation on the island of Guam where an offset daily was started by the Navy after recapture of that island from the Japanese.

Later the natives took over the publication and are now publishing an 8-12 page daily newspaper by offset with a circulation of 40,000, utilizing web equipment built in 1944.

"We often have to overcome an initial resistance to the offset process but every time we use it we get a better newspaper with more photographs and at a cheaper cost to the tap payer," the speaker declared.

In taking over the presidency of NALC at the Saturday luncheon, Mr. Starkey set forth a four-point program for the coming year:

1. *Safety in printing.* He urged all local clubs to have at least one program on the importance of safety in the litho plant.

2. *Promotion.* He said he will set up a special committee to produce a brochure outlining the benefits of litho clubs, to be sent to potential clubs around the country.

3. *Membership.* Mr. Starkey has authorized a committee to set up a

competition whereby the litho club obtaining the greatest percentage increase in its membership by convention time next year will win a "President's Cup."

4. *Mid-season meetings of the council of administration.* Mr. Starkey has drawn up plans to have three simultaneous mid-season meetings; in the Mid-West, East, and the South-West, each presided over by a national officer. "In this way we can reduce the travel expenses of the delegates and increase attendance," he explained.

Lithographers from the Chicago area helped swell attendance at the Saturday morning quiz panel to near capacity, and the eight-member panel was kept busy for nearly three hours answering questions on all phases of offset.

(The quiz session is reported in an adjoining article.)

Concluding the convention, 12 lithographic specialists, from Chicago and the surrounding area, conducted round table discussions for informal consultation on special problems that could not be handled at the quiz panel.

Conducting the round tables were the following:

CAMERA-MASKING: *Edward Atkinson, Ilford, Inc., and Joseph Jiloti, Eastman Kodak Co.*; COLOR SEPARATION: *Rudolph Kienast, U. O. Colson Co., Paris, Ill.*; INK: *Emmett Flaherty, Gaetjens, Berger & Wirth, Inc.*; PAPER: *William Dodd, Champion Paper Co., Pasadena, Tex.*; PLATES (surface): *Eugene Bulinski, Runkle-Thompson-Kovats, Inc.*; PLATES (deep-etch): *Edward Farrell, Magill-Weinsheimer Co.*; PLATES (presensitized metal): *David M. Smith, Chicago Litho Products Co.*; PLATES (presensitized paper): *Anthony Ensink, Ensink Distributing Co.*; PRESSES (small): *James Gianpetro, 20th Century Press, Inc.*; PRESSES (large): *Harold Knuth, Inland Lithographing Co.*; and ROLLERS AND BLANKETS: *Karl Fox, Rapid Roller Co.* All the men are from Chicago except Kienast and Dodd.

During most of the afternoon the tables handling questions on color separation, small presses, and presensitized plates were kept busiest. In addition to the round table discussions there were many nearby informal groups of lithographers who were discussing problems among themselves.

Climax of the convention was the annual banquet on Sat. evening.★

Donnelley Vice President Dies

Roy Taylor Anderson, 58, vice president in charge of sales for R. R. Donnelley & Sons Co., Chicago, died May 11 in St. Francis Hospital, Evanston, Ill.

ARE YOU SATISFIED?

(Continued from Page 77)

duction men are not infallible. They may not give you specifications that would permit you to do the job in the most economical manner. Yet, how

many of you will take the time to quote on the job as requested and at the same time offer an alternate set of specifications, pointing out to the purchaser, that a few minor changes in specifications will reduce the cost without materially affecting the finished piece? The purchasing agent is vitally interested in saving money. The lithographer who displays this same interest is the lithographer who ends up with an order.

Lithographers who are in the display field are constantly looking for

new ideas to submit to your clients. As a result you have close contacts with creative men, either as part of your organization or as suppliers of yours. How creative are you in the other phases of lithography? In retrospect, you have probably come across ideas that would have been a natural in promoting sales of some product. It would be a simple job to rough up a dummy and present it to the prospective account. The idea may not be adopted but you have opened the door to a new client. Otherwise, you have no choice but to sit back and wait for the call to come in and quote on a job. You cannot be complacent if you want lithography to continue to grow.

In the last 15 years, I have seen my company's lithographic purchases advance from 25 percent of our purchases to 75 percent. I have seen outdoor banners, silk screened on cloth, changed to lithographic cloth banners containing halftones of tires. Acetate printing requiring long runs now is available in short runs because of lithography. In fact, you have opened up many new fields. The packaging field has barely been explored. Mounting charges can be eliminated to a great extent by lithographing directly on board. In addition, phonographs have made a tremendous comeback. As a result, more recordings are being sold. Record covers, in full color now are purchased in tremendous quantities.

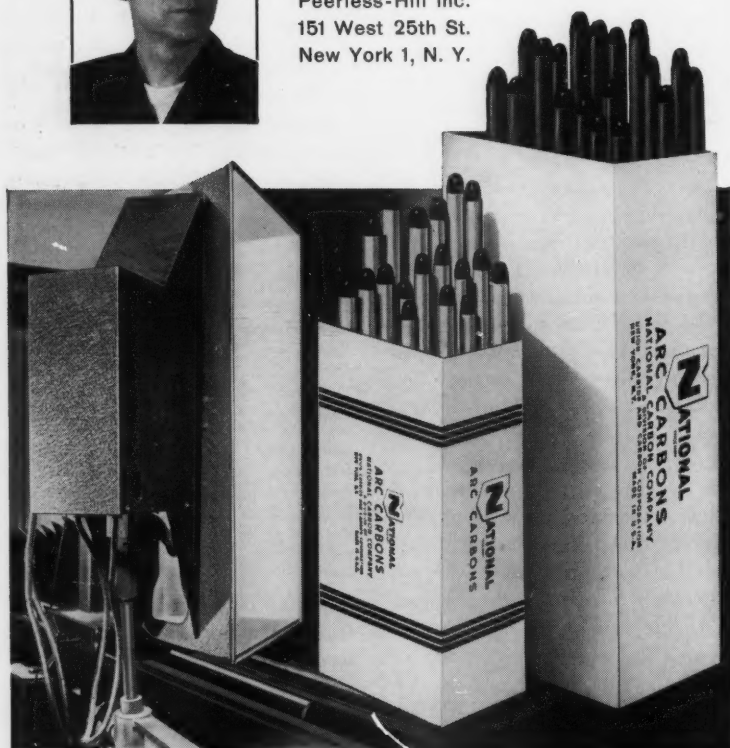
I have mentioned a few items that will permit your customer to get more for his dollar. Anything that helps the customer will help the lithographic industry which in turn will help you individually. You are not merely competing with each other, or the other processes of the graphic arts. You are competing with other media, such as television, radio, news papers and magazines. At the present time, let us say you have approximately 40 percent of the market. Can you imagine what your profit and loss statements would read like if you were all sharing 60 percent of the market? I assure you the answer will read in black ink; black ink with absolutely no tinge of red. Not even a 50 percent benday of the red.★

"For true white light, so essential to fine reproduction, 'National' carbons can't be beat!"



Arthur G. Belchier

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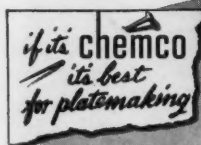
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Write For Complete Literature



what's in it for you?

The answer is — plenty! Chemco research has recently achieved a lithographic film advancement that is winning orders and re-orders from Photo Lithographers.

Powerlith film now gives its users maximum latitude in line work, without sacrifice of halftone quality. By this we mean, considerable variation in line exposure is possible without loss in density, or filling-in of fine lines.

Powerlith is available in a broad range of sheet sizes to meet every conceivable offset photographic requirement. But have you considered the economy of using roll film?

(If you make more than forty negatives a day, Powerlith film in rolls, together with a Chemco Model F-1212 Roll Film Offset Camera will make money for you in your gallery.)

Contact your local Chemco representative for details and samples of this new Powerlith Film.



PHOTOPRODUCTS COMPANY, INC. GLEN COVE, N. Y.

ATLANTA BOSTON CHICAGO DALLAS DETROIT NEW ORLEANS NEW YORK

Delegates Visit Litho Institute

Delegates to the 28th annual convention of the Illinois Vocational Association in Chicago last month included on their program a session at the Chicago Lithographic Institute on the afternoon of April 5. After a tour of the school quarters at 1611 W. Adams St., they were given "A Short Course in Lithography" by Frank F. Oehme, manager of the model training school for lithographers. Included among the visitors were teachers of vocational arts, including printing, in the Illinois public, private and parochial school systems.

Keating On Bingham Board

James T. Keating, manager of the Baltimore branch factory of Bingham Brothers Co., New York, recently was elected to the board of directors. At the same time, the company announced that Albert H. Miller will remain in his capacity as a member of the board.

Chemco Names Kaplan

Chemco Photoproducts Co., Glen Cove, N. Y., recently announced the appointment of Burt Kaplan as its new advertising and sales promotion manager. Mr. Kaplan's background includes account and copy work in the agency of Huberhoge & Sons of New York.

RBP Colorcraft Names Manager

RBP Colorcraft of Belmont, Cal., has appointed Andrew Young to the position of manager. The firm specializes principally in three-color short-run lithographic production.

SAMUEL FLACK, a lithographer for Inland Press, Chicago, died in a hospital there April 30. He was 59 years old and had been closely identified with the lithographing trade for most of his career. Surviving are his widow, Florence, two sons, two brothers and two sisters.

ML

CHARLES O. DAVIES has been elected president of Hayes-Lochner, Inc., Chicago trade composition firm. He formerly was treasurer of the

company and succeeds Carl F. Lochner, who became chairman of the board.

ML

JOHN L. KRONENBERG, manager of the S. D. Warren Co. litho division, was the principal speaker at a recent meeting of the San Francisco Club of Printing House Craftsmen. He discussed paper manufacture, flaws, and techniques by which the pressman can overcome irregularities.

ML

PETERSON-HEYNE-PINGREE, Oakland, Cal., lithographic firm, has become a member of the Associated Printing Industries, area-wide organization of employing printers.

MARTIN CANTINE Co. announced last month that its New York office now is located at 960 Sixth Ave. Telephone number is CHickering 4-6090.

ML

JOHN RAE BRUCE, a salesman for 27 years with R. R. Donnelley & Sons Co., Chicago, died April 22 at the age of 58. Burial was at Syracuse, N.Y., where he was born.

ML

ILLINOIS PHOTO GRAVURE Co., which used the collotype printing process, has gone out of business in Chicago and John H. Denson, former head of the firm, has become associated with Black Box Collotype Studios in that city.

FOR EVERYTHING THAT MAKES AN
OFFSET PRESS A

Star Performer--

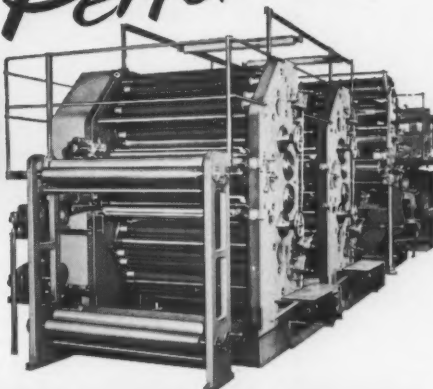
THE
Hantscho

35" x 50"

2-COLOR

HIGH SPEED

PERFECTING



ROLL FED LITHO PRESS & FOLDER

Especially designed for mass production at low operating cost, this popular press has been proved ideal for magazines, manuals, work books, children's books, encyclopedias, etc.

And it's loaded with new and exclusive developments in design and construction. For example: a new adjustable plate clamp to allow close registration on color work.

Some of the other special features of this press are

- ★ Smooth operation at speeds up to 16,000 cylinder r.p.h. assured by printing unit engineered on a three-frame principle, mounted on a heavy base.
- ★ Solid forged steel printing cylinders mounted on pre-loaded self-aligning roller bearings.
- ★ Accurate settings and positive locking on all roller adjustments.

- ★ Composition-covered ink vibrators to prevent stripping.

- ★ Vibrator motion adjustable to facilitate split fountain work.

- ★ Provisions for: electrically controlled side and running register. Dryer and water cooled rollers for the running of machine coated stock. Cross and running perforation.

Built on the unit principle, this press can be supplied with one perfecting unit and folder. Other units can be added for as many as four or more colors, two sides. Rewinder, sheeter and special folder are also available. Standard infeed rolls stacks or automatic pasters can be easily attached.

When you want dependable printing performance that cuts production time and operating costs you want a HANTSCHO press.

For complete details write or wire.

George Hantscho Company, Inc.

602 SOUTH 3rd AVENUE, MOUNT VERNON, N. Y. • MO 7-8200, MO 4-9080

Midwest Representative: 153 West Huron Street, Chicago, Ill. • DE 7-3313

the ideal family of lithographic rollers

It takes more than one kind of offset rollers to satisfy American lithographic craftsmen because of the wide variety of the work they do. They select from these fine IDEAL rollers — so can you!

If you're proud of the quality you can produce on long, high-speed runs, must maintain uniform color throughout the job, want to be sure that you are always starting with fresh, clean rollers—GRAYTONE is for you.

MASTERLITH is the roller choice of the careful craftsman, the man whose primary objective is beauty; he knows these rollers will not absorb color, that they will control water in the distributing system, help him win litho awards.

In the job offset shop where the runs are often short, where plates and fast-setting inks are changed frequently, where you go from presensitized to zinc plates and then back again, and where speed is essential for long, steady runs, LITHOCRAFT black synthetic rollers are tops!

Of course you'll want to try the revolutionary new PLAST-O-DAMP system of Measured Moisture! You take no chance, just order one of the new Plast-O-Damp base rollers and a box of these remarkable new lintless, disposable covers. Watch the change from grayed-out copies to full color in moments.

IDEAL ROLLER & MANUFACTURING CO.

4

FINE ROLLER FACTORIES

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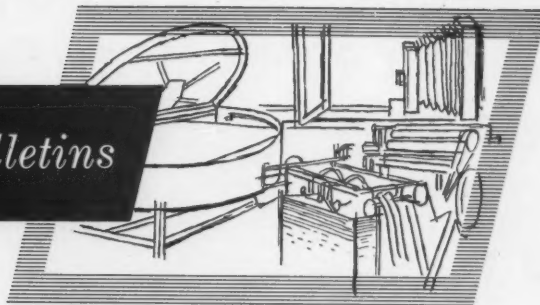
LONG ISLAND CITY, N. Y. 21-24 Thirty Ninth Avenue

HUNTINGTON PARK, CAL. 6069 Maywood Avenue

CHAMBLEE, GEORGIA 5100 Peachtree Road, NE

GRAYTONE ROLLERS	
MASTERLITH ROLLERS	
LITHOCRAFT ROLLERS	IDEAL LITHO HELPS
PLAST-O-DAMP  SYSTEM	

Equipment, Supplies, Bulletins



Fraser Paper Issues Booklet

Fraser Paper Limited currently is distributing its second annual "Graphic Arts Progress 1957," a booklet containing outstanding articles and abstracts from graphic arts publications. The articles, relating to new processes and new ideas in the graphic arts industry, make the booklet valuable to persons interested in industry progress.

Dampener Design Improvements

Miehle Printing Press & Mfg. Co. recently announced new dampener improvements for its 61 and 76" offset presses. The water fountain roller, water ductor roller and water fountain pan have been lengthened to achieve maximum plate dampening. In addition, to provide extra power for the lengthened rollers, the former 1/8-Hp transmission has been replaced by a 1/4-Hp unit.

A water fountain drive-clutch also is available to permit the drive to be disengaged when the dampener is off, thereby reducing wear on form roller covers. The increased use of paper covers has prompted this development. The heavy-duty transmission, longer rollers and pan now are standard equipment on the 61 and 76" offset. Drive-clutch is optional.



Announce New Liquid Fixer

Photochems Co., Inc., Mt. View, N.J., has introduced a new rapid fixer concentrate for lithographers. The new product, Vivofix, is available in plastic containers holding 6 1/2 gallons. A dripless spigot is a feature of the container.

The company claims that the plastic container does away with the problems of breakage, spillage and storage space. The plastic container is returnable and when empty is re-

placed with a full container. Vivofix also comes in a 5 gallon, non-refillable container.

Setmaster in Production

The Setmaster, a new collating and tipping machine for high speed production of carbon-interleaved or carbonless business forms is now under manufacture by Pierce Specialized Equipment Co., San Mateo, Cal.

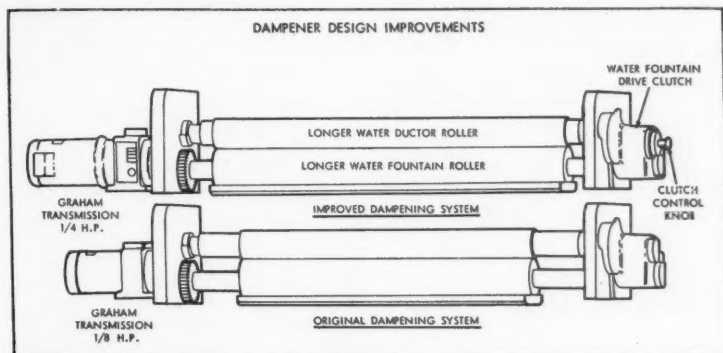
The basic principles of the machine were developed at the Arizona-Messenger Printing Co., Phoenix, Ariz., under the direction of Marvin Hammer, where a prototype and then a pilot model were built and put into production more than two years ago. Pierce has been licensed to manufacture and distribute the machine throughout the world.

The Setmaster collates, glue tips, slits and trims in one operation, either single sheets and carbons, or sections with carbons attached produced from web-fed presses. All carbon is fed from a single stack regardless of the number of parts in the form.

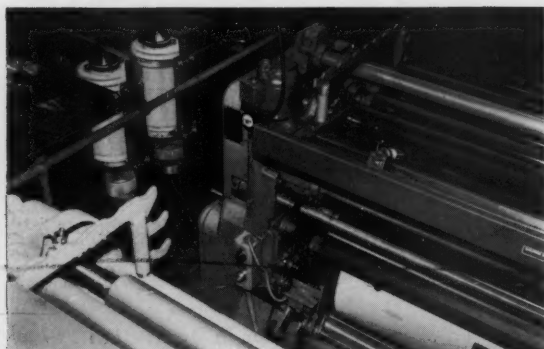
Introduce Overlay Film

Morley Associates, 10 Fiske Place, Mt. Vernon, N.Y., recently announced a new technical development, Morlex overlay film, for specific use in color separation of artwork for engraving and offset production.

According to the firm, hairline registration may be obtained for one or more color separations. The film is placed over the artwork and secured with tape. With a sharp knife blade, the amber film, around the areas not requiring color, is cut and peeled from a frosted plastic backing.



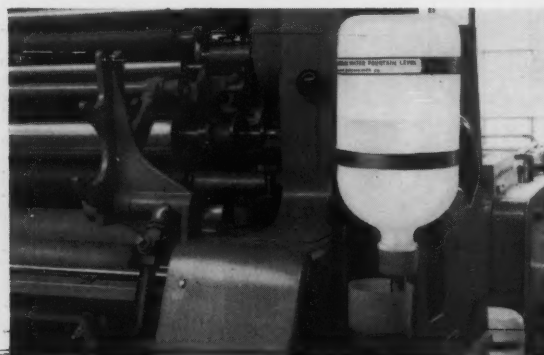
Pressroom and front office agree ... every press needs Baldwin® Water Levels



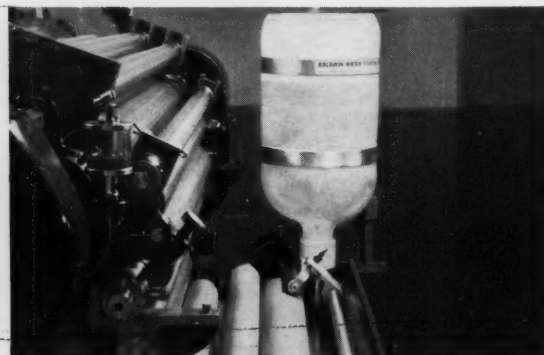
This photo shows Baldwin Water Levels, Ink Fountain Agitator, and Press Washer on a Miehle 61 2-color offset press.



Here's a Harris LTM 43 x 59 4-color offset press with Baldwin Water Levels and Variable Control Water Stops.



Miehle 41 2-color offset press with Baldwin Water Levels. Water supply can be checked by pressman at a glance.



This Harris LTP 23 x 36 2-color press is equipped with Baldwin Water Levels and Baldwin Roller Water Stops.

The wide acceptance of Baldwin Water Levels by the lithographic industry extends from the pressroom right into the front office. The pressman wants them because they save him a lot of time and work. The man whose job it is to watch costs and profits likes them because they reduce non-productive time and cut the cost of turning out that *quality* work that builds business.

Baldwin Water Levels maintain constant fountain-solution level *automatically* and assure a controlled supply of fresh solution in the fountain. What's more, they stabilize fountain settings and provide just the right balance of ink and water.

The translucent, unbreakable polyethylene reservoir has these important advantages: It keeps the

water free of airborne contaminants, cannot rust or corrode to set up chemical reactions in the fountain solution, and permits the water supply to be checked at a glance. An automatic non-spill valve eliminates sheet-spoilage caused by water spills when the fountain is filled.

All this contributes to work of higher quality at lower cost—on small presses and large presses, no matter what the size of the run.

Write today for information on equipping *your* presses with Baldwin Water Levels. And be sure to ask about Baldwin Water Stops, the ideal companion for Baldwin Water Levels, that put an end to floods and dry-ups which so often are a problem, especially when you run short sheets. Don't forget to include the make, model, and size of your presses.

WILLIAM GEGENHEIMER CO., INC.

80 Roebling Street
Brooklyn 11, New York
Phone: Evergreen 8-5610

Manufacturers of Baldwin Ink Fountain Agitators • Baldwin Press Washers • Baldwin Water Stops • Baldwin Water Levels

New Developer Announced

A new lithographic developer has been introduced by Clayton Chemical Co., 5420 N. Damen Ave., Chicago. The new product will be marketed in the U.S. and Canada under the name Clayton Premium Litho Developer. Clayton Chemical Co. is a division of the American Photocopy Equipment Co.

According to the company, the new litho developer is a high energy developer for the processing of all types of litho film. It has an exceptionally low fog level, the company said, which results in high quality negatives. Prices in the U.S. for the developer are \$1.79 per unit of the two-gallon size, six units per case, and \$7.57 per unit of the 10-gallon size, two units per case.

Senefelder Technical Data

The Senefelder Co., a subsidiary of Philip Lochman & Co., recently announced the availability of a new technical data brochure. Complete instructions are offered for the use of Senelith Super Coat and Senelith Surface Coating for offset plates. Also included in the brochure are instructions for offset pressmen for elimination of stripping, streaks or blind spots that result from the distributing rollers or steel riders of offset presses.

Announce Photo Stain Remover

A new stain remover, claimed to be the first formulated to remove fixer and developer stains from the clothing of photographers and technicians, has been announced by Anchor Chemical Co., 10721 Briggs Rd., Cleveland. Marketed in a plastic squeeze container labeled "Photo Stain Remover K-14," the remover is said to be completely safe for fabric and skin, the company stated.

New Du Pont Masking Film

Du Pont masking film, a blue-sensitive, continuous tone emulsion on Cronar polyester photographic film base, has been announced by the Du Pont Co. According to the firm, the new graphic arts film features high dimensional stability and reduced thickness. The masking film is de-

signed for the making of gravure and litho negatives and positives, and for other applications not requiring panchromatic sensitivity.

Cline Issues Register Brochure

A new illustrated four-color brochure, done offset, titled "Crosfield Color Register Controls for Web-Fed Presses," has been announced by Cline Electric Mfg. Co., 3405 W. 47th St., Chicago. It describes the Crosfield electronic system of color register controls for use on gravure, web-fed offset and letterpresses. Also included are descriptions of other similar devices for controlling web position accuracy for sheeting, slitting, folding and bag making.

Destaticizing Material

A new destaticizing material, both in concentrated and ready to use form, has been announced by Logo, Inc., 12933 S. Stony Island Ave., Chicago. According to the company, the formulas solve the problem of static attraction of dust on photographic negatives and plates.

Logo Antistatic Solution R-192 is a concentrate that can be reduced with water and it is unique, the company claims, in that it can be added to the final wash. Logostat R-2154 is supplied as a final wash and is an aid in preventing water spotting as well as destaticizing the film or plate. Logostat S-148 is used to destaticize and clean old film and plates.



steady performance

means increased quality...increased production

To do an effective job, a trapeze star must make no false moves. To do an effective job in your shop, you must make no false moves. Now you can reduce re-shooting and retouching efforts to a minimum by using a motor-driven, completely automatic nuArc lamp!

A nuArc will boost quality and production to an unheard of extent. Unconditionally guaranteed *steady* light coverage, color, and intensity sharpen the finest details. Automatic strike brings carbon to full brilliance instantly, maintains brilliance unwaveringly. 30-Day Free Trial.

Contact your dealer, or write for bulletin 205B

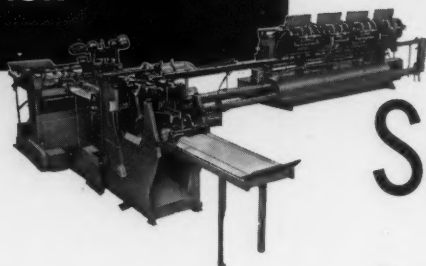
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EASTERN SALES AND SERVICE: 215 FOURTH AVENUE, NEW YORK, N. Y.

Dexter

McCain-CHRISTENSEN
COMBINATION



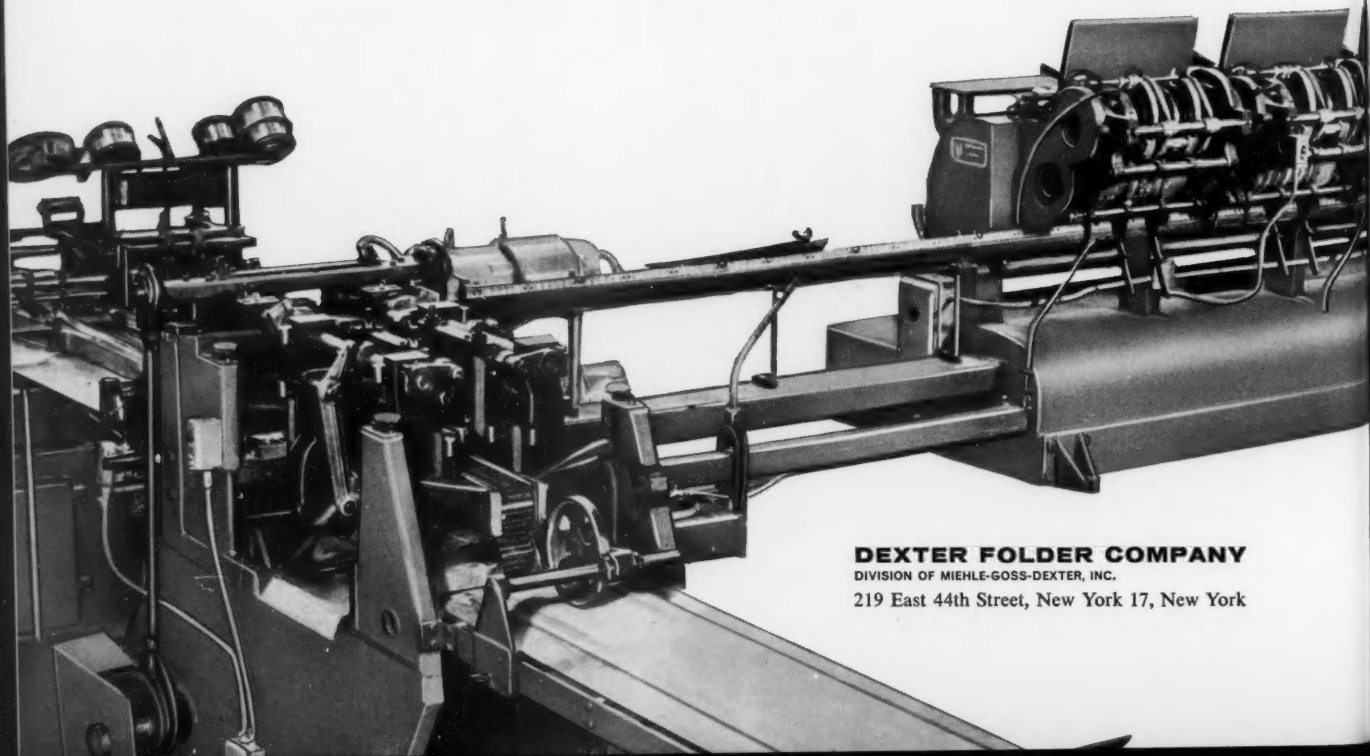
Automatic saddle binding.....

GATHER, STITCH, TRIM IN ONE OPERATION

Your best bet to eliminate bindery bottlenecks and meet delivery dates is to gather, stitch, and trim in *one completely automatic* operation with signature feeders, a gang stitcher, and a three knife trimmer.

Here's a combination that's accurate—each unit is built for precision...that's efficient—reduces handling problems and space requirements...that's flexible—can be arranged in many ways to meet a wide variety of plant conditions...and it's fast—outproduces other comparable equipment on all jobs. That's when running jobs one up. Production can be increased even more by trimming two signatures at once or by installing a fourth knife attachment for cutting apart books which can be printed and bound two-up.

Write or call today for Dexter's new booklet, just off the press, which describes the McCain-Christensen Combination and the three easy steps toward *Automatic Saddle Binding*.



DEXTER FOLDER COMPANY
DIVISION OF MIEHLE-GOSS-DEXTER, INC.

219 East 44th Street, New York 17, New York

Ready-To-Use Art Service

A new ready-to-use art service, reproducing continuous tone originals in the form of pre-screened prints, is being released by Harry Volk Jr. Art Studio, Pleasantville, N. J.

Known as the "Clip Book of Tone Art," the new service is released on a monthly basis and each issue contains more than a dozen new illustrations rendered in either wash or opaques. These are reproduced in 60-line screen by offset on coated reproduction stock.

The 60-line screen reproductions can then be shot with a simple line negative for printing of every description. Most of the illustrations are furnished in two or three different sizes so that the ultimate user has considerable latitude in reproducing them.

Davidson Issues Catalog

Davidson Corp., Brooklyn, has completed publication of a new 36-page illustrated catalog which provides data and pictures of its line of supplies, auxiliary equipment and attachments for the offset printing and duplicating fields. The new catalog lists eight attachments for regular offset lithography, simultaneous two-sided lithography, Davenporting, relief printing, imprinting, dry offset, numbering and perforating.

Water Color Offered by 3M

A four-color lithographed reproduction in fine detail is being offered free by Minnesota Mining and Manufacturing Co., Dept. M7-130, St. Paul, as an example of the quality obtained from "3M" brand photo offset plates. The 14 x 17" water color, suitable for framing, is a reproduction of an action painting by wildlife artist Les Kouba.

Stik-Wrap Packaging

Following development in its laboratories, Consolidated Lithographing Corp., Carle Place, L. I., has introduced, commercially, a new product, Stik-Wrap, designed for wrap-around packaging. The paper wrapping, which can be printed in color, bronzed, embossed, or die-cut, carries

strips of the adhesive along opposite trim edges. It is pressure-sensitive, requiring no water or mechanical equipment for adhesion.

To Exhibit St. Louis Printing

The printing industry of St. Louis has been invited to use one of the street level windows of Boatmens Bank at Broadway and Olive Sts., for an exhibit of St. Louis printing. Hube Echele, Warwick Typographers, chairman of the Graphic Arts Association public relations committee, is ac-

cumulating material from members from which he will build a display of the different phases of printing and production. The exhibit will be on display in the window for 30 days beginning in October.

Godshall in Photon Post

Earl N. Godshall, former manager of the Fotosetter Field Division for Intertype Corp., has joined Photon, Inc., Cambridge, Mass., as vice president of sales.

LITHO COLOR POSITIVES (OR NEGATIVES)

FOUR COLOR 150 LINE SCREEN

Made from your Ektachromes
or other Transparencies

You can use Color **ABUNDANTLY**
at these **LOW** prices

4" x 5"	(or smaller)	\$45.00
5" x 7"	.....	\$50.00
8" x 10"	.....	\$60.00
6" x 9"	.....	\$55.00
11" x 14"	.....	\$ 65.00
12" x 18"	.....	\$100.00
16" x 20"	.....	\$160.00

LARGE DISCOUNTS ON VOLUME ORDERS

Best reproductions are made
from 4"x5" Ektachrome trans-
parencies.

Extra charge for 8"x10" trans-
parencies — \$15.00.

NOTE THESE FEATURES

- Clouds added to skies (where practical) at no extra charge
- Screened positives in one week
- Made by famous Dexter color process
- Color mat proofs free
- Progressive color proofs available at following extra charges:
5" x 7" or smaller \$15.00, 6" x 9" and 8" x 10" \$20.00, 11" x 14" \$30.00, 12" x 18" \$50.00.
- Our experience includes the making of over 100,000 sets of positives
- Free information on pressroom procedures including inks, press and plates

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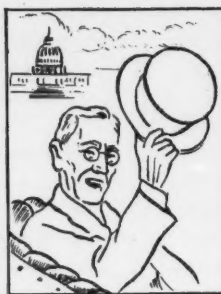
What
year
was
this



Black Tom
Explosion



Pershing vs.
Pancho Villa



Wilson
re-elected



Battles of Jutland
and Verdun

A significant year. It was in this year, we purchased the oldest manufacturer of LITHOGRAPHIC ROLLERS in the United States. The name of this Company was WILLIAM GAY. The year was 1916. Since then, they have always been incorporated as a division of BINGHAM BROTHERS COMPANY, —thus uniting the pioneer letterpress and lithographic Roller Makers of this country.

We manufacture every type of inking and dampening rollers for every type of press in the lithographic and offset field. We guarantee that our inking rollers will give a proper distribution of ink, and that our dampener rollers will control moisture perfectly. In other words, any roller leaving our factories show the result of BINGHAM'S individual touch.

We have had on our books, since 1916, the foremost lithographers in the United States. They have forgotten more about cotton, linen, nylon and silk threads, seamless and non-seamless covers, cotton covers, imported and domestic molleton, diagonal or straight weave molleton, and flannel covers, than most of the competitive manufacturers will ever know.

We can manufacture any type of rubber, synthetic, or plastic roller required,—for inking rollers or dampening rollers, for all makes of lithographic presses.

Good Rollers Create Good Impressions

BINGHAM BROTHERS COMPANY

Roller Makers since 1826

406 PEARL ST., NEW YORK 38, N. Y.



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WESTHAVEN

Refilling Aid Announced

A new device to eliminate messy struggling and juggling with heavy five gallon cans when refilling small cans of wash-up solution has just been placed on the market by Litho Research, Inc., 2417 Second Ave., Seattle. The new device, called a Tippa Can Holder, is a pivoted cradle-type all-steel unit with tilting action, which fits and securely holds all standard five gallon drums and enables strain-free one-hand pouring.

SHEET CLEANERS

(Continued from Page 46)

the cleaner nozzle is quickly adjusted so that maximum suction will be applied only over the desired width of the stock in use.

Adaptable to any make of press, and equally effective on general commercial runs as well as specialized jobs, the Oxy-Dry cleaner now is making Western's annual production of more than 1,000,000 decks of playing cards easier, faster and more economical.★

R & E COUNCIL

(Continued from Page 43)

materials handling in supply, process and dispatch of materials. Engineering projects include lighting, signaling controls, maintenance, cleaners and solvents and building facilities.

Color Program

Most of the Friday morning session was devoted to color printing. George Beck, Beck Engraving Co., was moderator. Opening speaker was George B. Dearnley, McCann-Erickson, who spoke on competition in this field.

The Time-Life Color Scanner was described, and masking was discussed by Arnold E. Rogers, of Rogers Engraving Co., and Milton Mild, Western Printing and Lithographing Co. Problems in stepping up to four-color presswork were enumerated by Walter A. Goldsmith, Edward Stern and Co., for lithography and Robert B. Davis, Davis, Delaney, for letterpress.

Warren B. Reese, MacBeth Day-

lighting Corp. and Philip E. Tobias, Edward Stern and Co., covered "Standardized Lighting for Color Appraisal." Ink and paper were discussed, respectively, by David M. Kirkpatrick, Fred'k H. Levey Co. and William R. Maull, the Mead Corp. Final speakers were Louis Rossetto, Mergenthaler Linotype Co., and Carl Sorenson, Lanston Industries, who talked about their units, the Linofilm and the Monophoto, both used for photocomposition.

Committee meetings were held on

both evenings, with attendance excellent at all sessions. Next year's meeting will be held at the Edgewater Beach Hotel, in Chicago, May 14-16.★

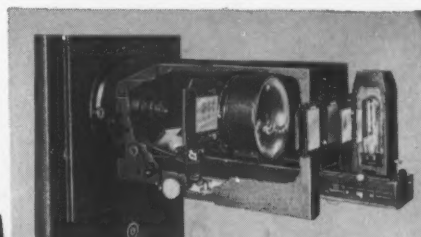
NALC QUIZ

(Continued from Page 35)

ink. Later peroxides are formed and they decompose as the inks sets. A long period of time, perhaps two to three weeks, follows before the ink reaches its final stage of drying.

Q: We are using zinc plates. Is

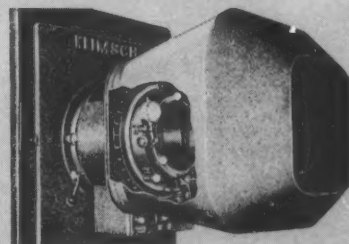
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SMALL COLOR FILMS



KLMSCH REPROCOLOR

Takes color slides from
35 mm up to 2 1/4" x 3 1/4"

For
LINE VARIATION and
ELIMINATION OF MOIRE



KLMSCH VARIOMAT

on **ANY HORIZONTAL PROCESS CAMERA**



Write for Complete
Literature and List
of Dealers

Here are two accessories that are absolute necessities in any shop. Both are made with the same expert craftsmanship you'll find on all KLMSCH Cameras.

REPRO GRAPHIC MACHINES, INC.

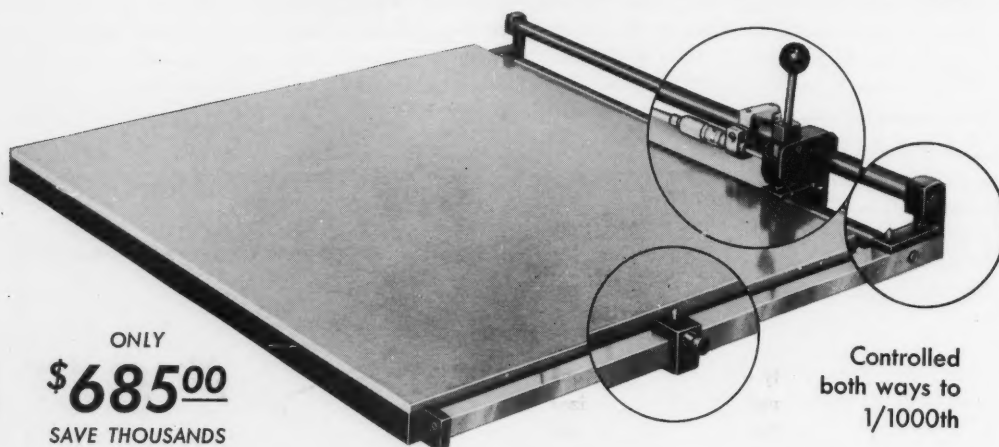
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Chesley F. Carlson

Controlled Accuracy



ONLY
\$685⁰⁰

SAVE THOUSANDS

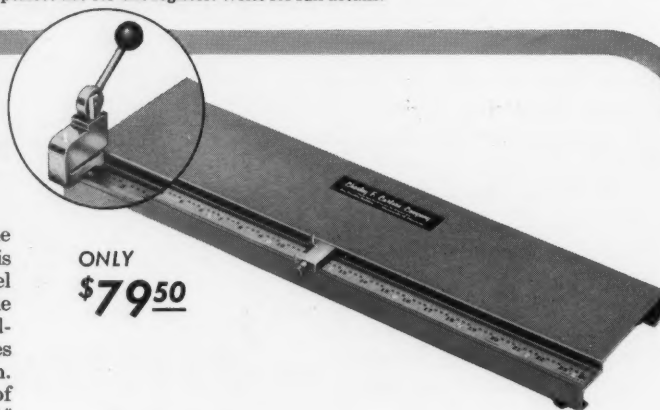
Controlled
both ways to
1/1000th

THE CARLSON PHOTO-COMPOSING

SPACER. Accurate to 1/1000th, this Carlson Photo-Composing Spacer does the work of machines costing thousands in stepping multiple negatives or on plates. Utilizing this proven, accurate punch-and-hole system with micrometer control, the Carlson Spacer operates at 4-times the speed of hand stepping—while maintaining perfect dot-for-dot register. Write for full details.

THE CARLSON STEP-AND-REPEAT PUNCH

This is practical equipment for the smaller lithographer. Although this is a fine precision-made, all-steel punch which steps with hair-line accuracy, it costs only a few dollars. The Carlson Punch utilizes our proven punch-and-hole system. It provides lock screw setting of three point optical finder, 24" etched stainless steel rule and self-aligning throat-stop for controlled accuracy with Carlson Master Strips. Write for details.



ONLY
\$79⁵⁰

NOTE: Any time within 18 months after purchasing a Carlson Step-and-Repeat Punch, you may trade it in at full price on a Carlson Photo-Composing Spacer.

Chesley F. Carlson Company

BEN FRANKLIN BUILDING • MINNEAPOLIS 15, MINNESOTA

there any good reason to change to aluminum?

GRANT: If you are having success with zinc, there is no necessity to change. However, aluminum can be copperized with more success than zinc and can give good results. There are advantages to both types of plates and your choice depends on the type of work you are doing, the length of run, etc.

Q: What is the best light to use for color separation positives?

ROEDER: Carbon Arc light has all the colors of the spectrum, and is the only good light to use for this work. There is a recent development using incandescent lights with very high voltage which has had some success.

Air-Conditioning

Q: What are the pros and cons of air-conditioning in litho shops?

BRUNO: There are many advantages to having air conditioning in a litho shop, particularly in the plate room, where lithographers say they can recover the expense in a year or two. Air conditioning is extremely valuable in the press room. For best results the air conditioning should control both temperature and relative humidity. In most cases we have found that a relative humidity of 45 to 50 percent with a temperature of 75 to 80° is ideal. WARDLEY: We have found with web presses that air conditioning is very valuable. Relative humidity can be a little higher with web presses so that the web does not break so easily.

Q: What percentage of the original tonal value of the subject should we be able to reproduce by lithography?

BRUNO: With smooth plates you can reproduce a 2 percent highlight and with conventional plates about a 5 percent highlight.

Q: We have trouble washing out plates in the press room.

SMITH: Usually when the plates are not rolled up immediately, gum is deposited over the ink. This must be washed out. (Moderator Oehme reported a novel use of table salt to run out the plates. He said that a Chicago lithographer had success

using this material when other methods failed.)

Q: What considerations must be made with four-color printing as regards dot size?

PREUCIL: A smaller dot size is recommended for four-color presses than for one color, because of the spread of the ink in wet trapping.

Q: How far have we come in lithography? Is there still more progress to be made?

BRUNO: We have come a long way in lithography since World War II, but there's still a lot of work to be done. We now have lithographic plates for almost every purpose and

most of them give excellent results. We used to strive in lithography to match the quality of letterpress. Now in many cases we can exceed it. The biggest problem now is to maintain consistently good work. For this purpose we need to make the best use of controls and instruments which are available to us.★

TECH. BRIEFS

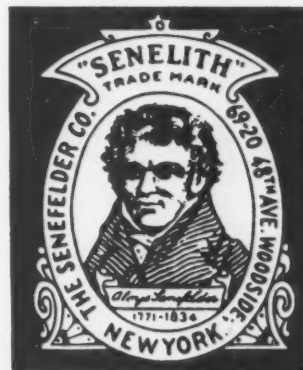
(Continued from Page 69)

with the greatest ease and highest production are discussed under headings of the various properties—flatness, moisture resistance and absorbency, surface ink absorbency, cleanliness, pick strength, stability,

the **Senefelder Co., Inc.**

SUBSIDIARY OF PHILIP LOCHMAN & CO.

Quality
products for
professional
lithographers



Senelith SUPER COAT (CASEIN)

Offers hard, clean dots and carries the finest halftone contrast. An exceptionally durable coating developed to give more impressions, serve all surface coated plate requirements.

Senelith DEVELOPING INK

Provides strong, black image desired by professional platemakers. Excellent chemical affinity to the exposed image, yet smooth and easy to apply and washes off non-image area without difficulty. Write for free literature.

THE SENEFELDER CO., INC.

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Twining 9-3701

PHILIP LOCHMAN & CO., INC.

2405 Oakton Street, Evanston, Ill.

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GRgreenleaf 5-6266

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a direct mail advertising idea — complete with copy and comprehensive dummy — in the form of booklet, folder, broadside, 4 or 6 page letter, or any other promotion format you believe will

HELP BUILD A GREATER N.A.P.L. and therefore a greater lithographic era

Here is an unusual opportunity to display your creative talent, and at the same time bring honor to yourself, to your Company and to your industry.

It will pay you well to be one of the top 5 contestants:

First Prize: An order to lithograph 7500 copies of your entry. You and your Company will receive full credit for creating and producing your prize-winning promotion-piece. NAPL claims the right to fit the cost to a budget of not over \$1,000. That's the only limitation.

Second Prize: Round-trip air transportation, hotel accommodations and complete registration for the 25th Annual Convention and Exhibit of NAPL at Chase-Park Plaza Hotels, St. Louis, Missouri, September 11-14, 1957.

Third Prize: \$100 Savings "E" Bond

Fourth Prize: \$75 Savings "E" Bond

Fifth Prize: \$50 Savings "E" Bond

NOTE: Your material must be postmarked no later than July 30, 1957. Whether or not your exhibit is selected for one of the top prizes your entry becomes the property of NAPL.

This committee of distinguished graphic arts writers and creative people will serve as judges:

HAMILTON C. CARSON, The Editor, *Modern Lithography*

MAURICE J. EARLE, The Managing Editor, *The National Lithographer*

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grain direction, squareness, alkalinity, and opacity and brightness.

PENETRATION OF INK INTO PAPER AND ITS RELEVANCE TO PRINT QUALITY. R. R. Coupe and A. H. Smith. *Journal of the Oil and Colour Chemists' Association* 39, No. 8, August, 1956, pp. 579-608 (30 pp.). This article begins by presenting a discussion of the various test methods developed for studying ink absorption into paper. The historical background together with the bibliography is fairly complete. The present work involves an apparatus for studying the rate of ink penetration based on the optical principle that as ink penetrates there is a fall in the amount of light reflected from the reverse side of the sheet. Some indicated conclusions are also discussed as (1) penetration of pigment, as well as vehicle, into the paper can occur; (2) filtration of vehicle from pigment will vary from system to system; (3) two stages of penetration are important (a) very rapid penetration during printing due to pressure, (b) slower penetration later due to capillary forces. The work appears well supported by graphs and tables.

ABSORPTION OF WATER BY OFFSET INKS. J. H. Bitter. *IGT Nieuws*, Vol. 9, No. 2, Feb. 1956, pp. 28-31 (In Dutch); *Printing Abstracts* 11, No. 6, June, 1956, p. 342. The effect of increased emulsification of water in offset inks on the final printed result has been studied by the IGT and the results are given.

Graphic Arts—General
FACTS ABOUT DERMATITIS. John Ellis. *The Process Journal* No. 19, Autumn 1956, pp. 19-20 (2 pages). Dermatitis is a real, if well-known hazard in the photo-engraving industry, the principal causes being the bi-chromates, chromic acid, metol and to a lesser extent, formaldehyde. This is a summary of the Haldane Society Conference, "Dermatitis in Industry," held on Saturday, 19th, November 1955, and the Haldane Society Bulletin, "Dermatitis and the Law." The principal speakers were Dr. Michael Feiweil, dermatologist and Mr. H. Nyman, LL.B., solicitor.

***MOISTURE AND HUMIDITY CONTROL PROBLEMS OF THE SMALLER WORKS.** B. J. Peach. *Brit. Print.*, Vol. 69, No. 4, Apr. 1956, pp. 22-7; *Printing Abstracts* 11, No. 6, June, 1956, p. 341. The importance of humidity control is discussed, and different types of hygrometers and methods of controlling humidity without the expense of complete air conditioning are described.

PROCESS INKS

(Continued from Page 66)

spokes of the wheel and the lines going into the center represent increments of 10 percent. Notice that there are six zero-to-one-hundred per cent zones around the circumference

of the wheel. These zones are between magenta and blue, blue and cyan, cyan and green, green and yellow, yellow and red, and red and magenta.

Small dots are placed on the chart for the different colors according to the hue on the hue error and the grayness that you measure and calculate for a particular color. The hue will be across the wheel opposite the color of the filter which gives the largest density reading. The hue error will shift this point toward the color

of the filter that gives the smallest density reading. Final position for the point will be toward the center of the wheel, according to your calculation for the color's grayness.

For example, consider the magenta shown in *Table I*. It had a maximum density of .89 to the green filter and a minimum density of .09 to the red filter. Its hue error was calculated to be 30 percent. Dividing the low reading by the high reading, we find that the grayness of the magenta is just a

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little more than 10 percent.

To locate this point, go straight across the wheel opposite the green to locate the correct color zone. In this case, you will now be at point M-O% on the extreme outer line of the wheel (six o'clock). The hue error of the color is 30 percent. The lowest density reading was to the red filter. Therefore, the point now shifts toward red by 30 percent. The final location for the color is in toward the center of the wheel by 10 percent (the first line) to show its grayness.

The correct color zone will be obvious in most cases. In many cases, it may not be. It is because of this that we suggest locating the correct zone by going across the wheel opposite

the filter that gave the highest density reading. This procedure is foolproof regardless of the color being measured.

Added help in visualizing the color is to paste a small ($\frac{1}{4}$ -inch) circle of the actual color measured on the chart where your calculations show the point should be.

Use of this chart will permit you to visualize directly the amount of difference in the hue and purity of the three process inks as compared with "ideal" inks that would require no color correction. You can also compare different inks and the hue and purity of the same inks when they are printed on different papers.

In addition, the chart can be of

considerable help in understanding the limits and potentialities of a set of process inks, trapping conditions, the opacity of the inks, and the effect of the surface scatter of light from the inks. This is done by (1) predicting the color that should be produced by an overlap of two or three colors and (2) comparing this with the actual color produced.

The color produced when one ink overprints another can be any hue between the two. It is determined principally by the relative strengths of the two inks. To predict what the hue of an overlap should be, you merely add the filtered densities of the two inks, compute the predicted hue using the same hue error formula for single inks, compute the grayness of the combination, and plot these figures on the chart.

Suppose, for example, we wished to predict the hue produced by the overlap of the yellow and magenta given in Table I. Adding the yellow and magenta densities to the three filters gives .11 to the red filter, .97 to the green filter, and 1.19 to the blue filter. Then, using the hue error formula for single inks, the hue of the overprint is shown to be 20 percent toward red (the lowest of the three readings). Grayness of the overlap, figures out as a little under eight percent.

This point of predicted hue and grayness is then plotted on the chart as described before.

The actual hue of these inks, when printed one on the other, should be the same as the predicted hue if the second ink down is fully transparent and if it traps perfectly. In commercial production, however, under- or over-trapping may occur, the second ink down may be partially opaque, or the physical characteristics of the paper and inks may cause some surface scatter of light. These conditions can shift the predicted hue toward either the first or second color down.

To visualize what actually occurs in any given case, follow the same procedure as described before for making the prediction.

Make plots of your yellow, magenta and cyan inks on the charts as well as their red, green and blue over-

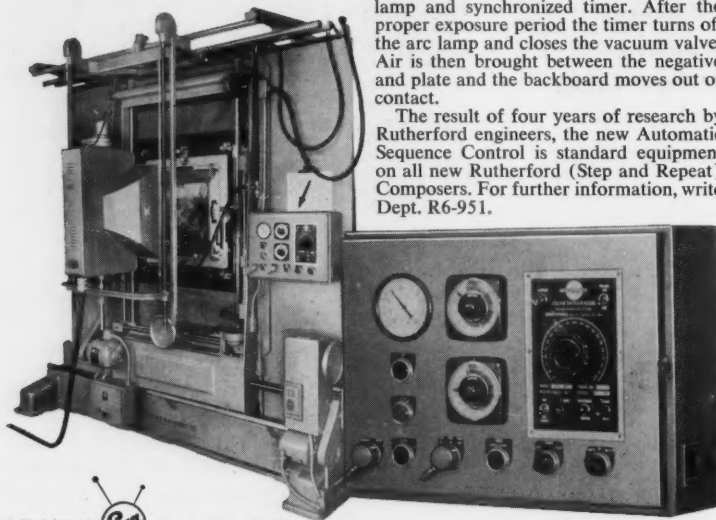
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prints. Then draw straight lines between each pair of points around the wheel. The area enclosed will define approximately the limits of pure colors it is possible to produce with this set of inks. Any position outside the lines represents hues that are purer than this set of inks can produce. The purest hues of two-color mixtures which this set of inks can produce will fall directly on the lines.

Grayness and Gray Balance

In addition to making the plot based on measurements from the solid colors on the LTF Color Test Strip, it is also desirable to add other points on the same plot. These points are based on measurements from (1) the three-quarter, half, and one-quarter tints, and (2) the three-color equal dot size overlaps. Use the same calculations for hue and grayness as before.

Doing this will help you to visualize the hue differences that occur between tints and solids, on different papers, and with different halftone screen rulings.

Sharply printed tints on coated paper are usually grayer and warmer (more toward red) than the solid colors. The finer the screen ruling and the duller the paper, the less you will note this effect. Your ability to visualize information such as this can help you to see why adjustments in masking systems often are needed for different papers and different screen rulings.

The addition of the third primary to any two-primary mixture grays the hue. In such a case, the amount of grayness can be calculated by using the grayness formula. The grayer the ink or mixtures of the ink, the closer the plotted point will be to the center of the wheel (100 percent gray).

If the LTF Color Test Strip is included on production jobs it can be a valuable tool for the pressman. The three color overlaps of equal dot sizes (last three squares) should be made to produce neutral gray under certain conditions. The strength of the second and third colors down should be adjusted and printed so that these patches produce gray for

(1) three-color printing when photographic masking has not been used or (2) when the color correction system that is used masks the strength of the three colors equally. In the case where only yellow and magenta are masked, the cyan ink should be run weaker so that the equal dot size of the three colors produces brown.

The color produced in these patches will vary according to the opacity of the inks and how well the ink is trapping. Small changes in ink strength—changes that are hard to see in the

solid color bars—show up quickly as a color shift away from gray in the three color equal dot size patches. The LTF Color Test Strip can thus be useful in quality control work.

Because of imperfect inks and faulty trapping, the actual color of these three-color overlaps of equal dot sizes tends toward brown in the lighter one-quarter and one-half tints. This is especially so of work done on single color presses. On multicolor presses and when there is under-trapping, these lighter tints are often

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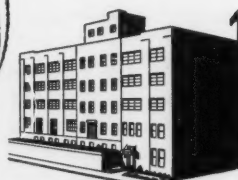
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bluer than the overlapped solid colors.

Neutral gray cannot be produced with three process inks unless the hue of the first two colors printed is complementary to the third color. If it is, then the strength of the third color can be adjusted to produce neutral gray or gray balance. Complementary colors are easily found on the hue and purity chart. Simply draw a straight line from the first hue, through the center of the wheel to the opposite side.

On single color presses printing the usual sequence of yellow, magenta and cyan, the red (yellow-magenta overprint) in a potential gray must be complementary to the cyan ink. Similarly, in two color press operation with yellow and cyan printing first, the green which is produced by the overprint must be complementary to the magenta ink that is used if gray balance is desired.

Conclusion

These brief statements about the evaluation of process inks are offered only as a guide to help experienced lithographers to organize their thinking and experience with process work. They also should help in achieving greater standardization in a plant's operation and methods.

Everything stated in this article applies strictly to mechanical process reproduction and to inks that are made for process work. In other words, the "efficiency" of an ink cannot be applied in its usual literal sense to just any ink. Ink "efficiency" means something only when it is thought of as "efficiency as a process color used to make other colors." These calculations to determine the "efficiency" of other types of ink such as special non-process colors, background colors, etc., would have no meaning or significance.

(This article is based in part on LTF's Publication No. 329, *THE LTF Color Chart*.★)

PHOTO CLINIC

(Continued from Page 59)

bed of your camera is sagging, distorted or damaged in some way.

Dust Spots

Q: I have been having a lot of difficulty with dust spots when making large contact tints in the vacuum printing frame. I tried every precaution without success. Have you any suggestions that might help me?

A. G., CLEVELAND

A: If you have an extremely dusty darkroom you are fighting a losing battle regardless of what you try. Extreme cleanliness and a pressurized darkroom are the principal methods of overcoming dust problems.

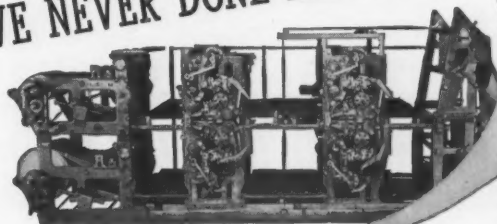
You might try wiping the glass and film surfaces with an anti-static cloth prior to exposure. Such a cloth not only cleans and polishes the surfaces but, because of an impregnated chemical, prevents the treated surfaces from becoming electrically charged (static electricity).

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It is the static electricity generated by wiping with an ordinary cloth that charges the surfaces and actually causes them to attract small dust par-

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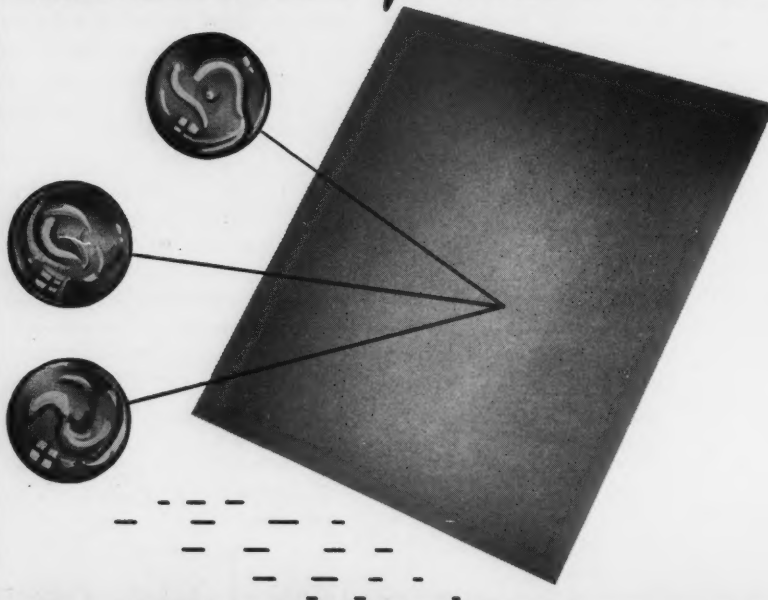
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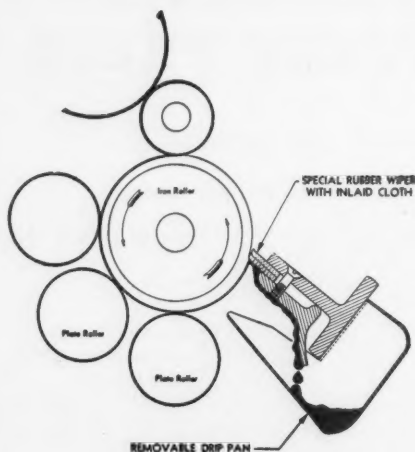
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ticles out of the air. Static electricity is also generated during the handling of the film.

An anti-static cloth specifically made for photographic purposes can be obtained from Haber & Fink, Inc., 12 Warren Street, New York 7. Anti-static solutions also are available and are sold in most camera stores. Humidity control should also be considered if your problem is acute. Static electricity, and consequent dirt attraction, is less of a problem in moist than in dry air.★

3-COLOR

(Continued from Page 52)

for increased and properly balanced illumination of the transparency.

Tests for Exposure Time

To establish the basic data for testing on exposure time, select a transparency with a density range of about 2.3 to 2.5. Make the proper masks and register the mask to the transparency. Arrange the masked transparency in the camera or projector and proceed as follows:

1. Use the red filter for the trial exposures, and make exposure strips on one piece of film. Each exposure should be increased by some unit of time. If, for example, you are using one of the three-color projectors, start with an exposure of three seconds at f22 for same size and make additional exposures, of 6, 9, 12 and 15 seconds.

2. Develop in fresh developer for 2½ minutes.

3. Check the results and try again to bracket the exposure by a little under and a little over what you think will be the proper exposure.

4. Make another test, consisting of three exposures on the same piece and develop.

5. Check results and, if satisfactory, make a full size test. If results are not satisfactory, continue testing.

6. Check with the data sheet for the film you are using to obtain filter factors for blue and green filters.

7. Make a test shot with these factors. Compare the results and adjust exposures accordingly.

If you have a densitometer that is equipped with a photometer head, you can establish an exposure based on foot candles for each filter. This will further standardize exposure times for various enlargements, reductions and aperture settings.

These tests may at first appear to be a waste of time, but it is impossible to exaggerate their importance. They should be carried out efficiently, and exceptional diligence should be exercised in interpretation of your results.

Don't rush into making separations until you have completed your testing and are sure of your results. *Test, Interpret and Evaluate.*

Separations on Ortho Film

In our discussion to date we have considered only separations using pan

film. It is of course possible to use the combination of a color blind film, an ortho and a pan for separations. In this procedure the red filter negative, blue printer, is made on pan film; the green filter negative, magenta printer, is made on ortho film; and the blue filter negative, yellow printer, is made on color blind or ortho film.

This procedure offers the advantage of working just one separation on pan film and full use of darkroom safelights when making the blue and yellow printer. The color sensitivity of the film in combination with the filter will give very acceptable results.

Conclusion

At the beginning of this article we stated that making the separations is



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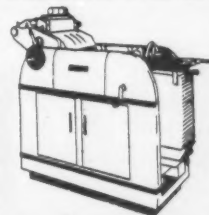
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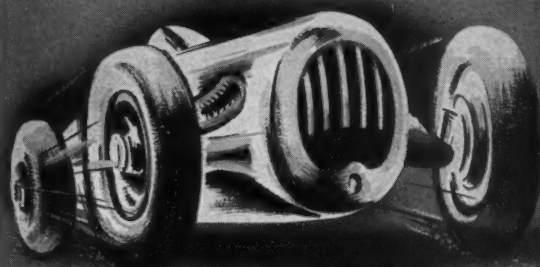
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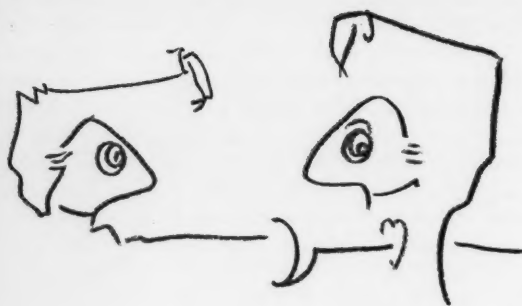
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the last point of interest to the photographer. Actually it is not. The separation negatives are not the end but a means to an end, which is the finished product, the printed acceptable sheet. In proving and printing, the photographer again uses his knowledge of color in accepting or rejecting the proved results, and in the printing he can instruct the pressman on reflection density for color control.

The concluding article next month, "Proving and Printing," will include an insert of a three-color job, supplied through the courtesy of the Davidson Corporation, Brooklyn, which was printed on a Davidson press. Complete data on the printing and a synopsis of three-color procedure will be printed on the reverse side. ★

DV-TV

(Continued from Page 38)

and treatments on a litho plate. The film showed one plate coated differently in four sections. Although the image was good in all sections at the start of the press run, serious problems occurred in the untreated or partially treated sections.

"When the print goes gray the tendency of most pressmen is to add more ink," he remarked. "That is wrong and will just increase your troubles. The dampeners will get dirty, halftones will fill up and the sheets may get so wet that when they are folded, even the offset will offset!"

Normally building up the packing with a .001 tissue is a lot better way to cope with the problem, he advised.

Mr. Preucil gave two demonstrations in the afternoon. One was an entertaining display of optical illusions involving judgment of size and distance and color perception. The other was a more technical approach to color measurement and masking, describing its need, and how it must be tied in with the ink, paper and printing conditions to be effective. The latter talk included a discussion of the LTF color strip which can be used to help set up a masking system.

In two other talks, Mr. Bruno listed instruments for control and stand-

ardization, and Jack White explained the educational and audio-visual programs of the Foundation. Mr. Bruno also looked into the "crystal ball" to forecast new developments. A lively quiz session concluded the program.

A sheet accompanying the program for the DV-TV listed references in LTF for more detailed information on the topics discussed by the speakers. ★

STA

(Continued from Page 77)

same publications, the same TV shows and, as active practitioners in the graphic arts, become involved in the same kind of promotional problems and pressures.

"This rather sterile state of affairs may be due to the pressure by the client for a proved formula. Many designers thus find it expedient and profitable to go along with the tried and true — long after it has become the tried and true."

Accompanying illustrations of lithographed pieces are typical of the pieces hung in the show. ★

LETTERS

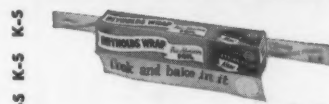
(Continued from Page 53)

in *Modern Lithography*. Can you tell me their names?

R. J. Richards,
Technical Advisor
Cadillac Lithographing Co.,
Detroit

The article you refer to on "Press Sheet Inspection Light Booth or Table" appeared in the May, 1948, issue of *Modern Lithography* starting on page 33. It was written by William C. Stone and Andrew Balika, both of Copifyer Lithograph Corp. in Cleveland. The article talks about viewing color, especially on the night shift. It mentions some of the problems and tells how these problems can be remedied with proper lighting. It includes a diagram showing the position of colored tubes together with a bill of materials telling exactly what is needed, and the approximate cost.

We have no extra copies of this issue on hand in our office, but perhaps you can get hold of a copy in your library. You could also get the information from Mr. E. A. Lindsay, at General Electric Company, Nela Park, Cleveland. Very possibly he would have a copy of the information as it was presented in *Modern Lithography*.—Editor



IDEA NO. 106

Radiant Replica for Reynolds

We're wrapped in admiration for this stand-out example of a KLEEN-STIK "SLIDE-STIK" for REYNOLDS METALS CO., Louisville, Ky. DICK BOHNEN-KAMPER of the HENNEGAN CO., Cincinnati printers, broached the idea of a 3-D "shelf-talker" to Reynolds' TOM ISAACS. Their agency, ZIMMER-McCLASKEY, carried out the design, and Hannegan did the oh-so-lovely print job on actual foil. Clever die-cutting "pops out" into an 8" miniature of the Reynolds Wrap box, ready to attach to shelf edge or other vertical surface by a simple peel-an'-press of the KLEEN-STIK backing strips.

Outstanding

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IDEA NO. 107

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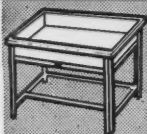
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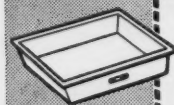
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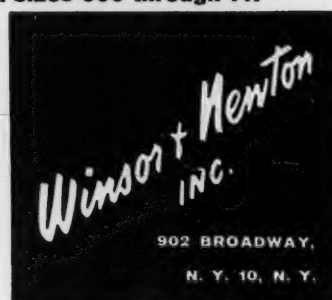


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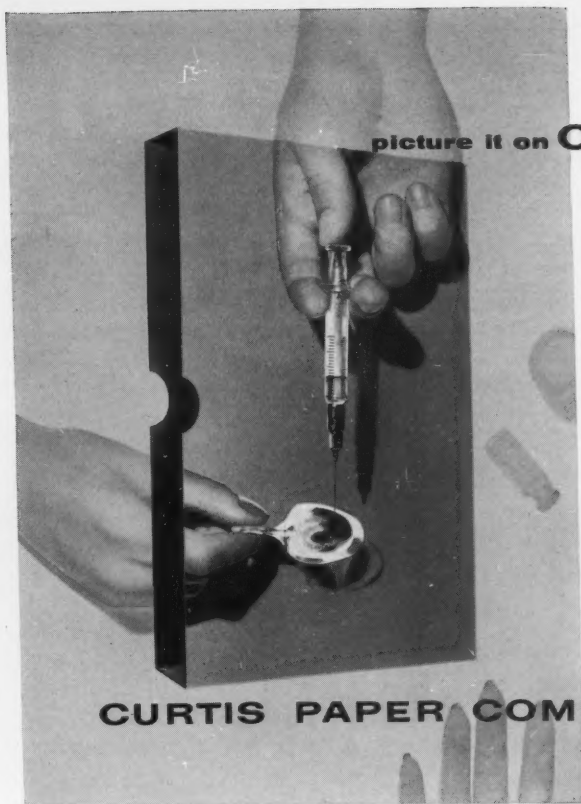
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To insure net profit this year calls for "change."
We are changing our policy . . .

1. Building more folders than ever before . . . many more . . . so we can keep on pricing them fractionally, compared to other printing machinery.
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Hartmark Cards, Inc., Kansas City, Mo.	4
U. S. Army Map Service, Washington, D. C.	13
Map Photoengr., Div. of McGraw-Hill, New York, N. Y.	11
Kaiser Lithographing Co., Chicago, Ill.	6
Repro-Printers Corp., Chicago, Ill.	7
Defense Printing Service, Washington, D. C.	13
New Graphic Printing Co. of N. J., Westfield, N. J.	4
Consolidated Lithographing Co., Long Island, N. Y.	9
Intaglio Service Corp., New York, N. Y.	11
Buchanan Inst. of Tech., Rochester, N. Y.	12
Best Engraving Co., Philadelphia, Penna.	6
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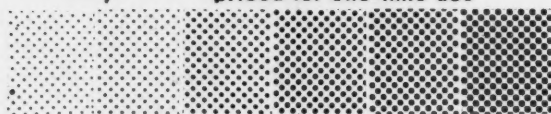
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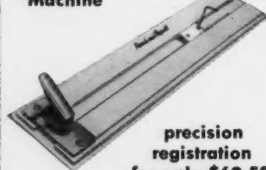
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Moving into new plant, installing 40" camera. Have 31" all metal Valette camera, perfect condition, vacuum back, screen elevating mechanism, flash lamp, set of late model (\$1,350.00) NuArc lamps. 24" color-corrected Tessar lens, transparency holder. Will dismantle, load on truck: \$3,750.00. Also 24" all metal directoplate camera, stoffat back; pair of 45 amp, lamps and carriages; special copy board; 24" lens, two times enlargement, five times reduction, flash lamp. Complete: \$1,450.00. Address Box 289, c/o *Modern Lithography*.

Miehle Describes Plate Clamp

Miehle Printing Press & Mfg. Co. is offering a four-page, two-color brochure describing its new "Miehle-grip" plate clamp. According to Miehle, the new clamp cuts plate changing time to 90 seconds by simplifying plate positioning and speeding lock-up. It is particularly useful in operations involving short runs with frequent plate changes, the company said.

The brochure presents an illustrated step-by-step explanation of

MISCELLANEOUS

Wanted . . . 22½ Circular Levy Screen in good condition, with or without holder. Reply to: Roberts Engraving & Litho Plate Co., 725 E. Washington Blvd., Los Angeles 21, California.

FOR SALE

2—COLOR HARRIS OFFSET
42" x 58" Model LSK; may be seen operating on fine color work.

Ernest Payne Corporation
82 Beekman Street New York 38, N. Y.
Beekman 3-1791

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Provides tough, scuff- & scratch-resistant finish.
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509 W. 56th ST., New York 19, N. Y.

plate mounting and make-ready procedure, including a description of the quarter-turn locking eccentrics.

nuArc Brochure Listed

The nuArc Co., Inc., Chicago, has just released a new brochure on motor driven arc lamps as applied to cameras, photocomposing machines and printing frames. This brochure is complete with illustrations, actual installation photos, charts, reflector sizes and other data, for lithographers as well as photoengravers.

time's
a
wasting

The clocks keep ticking away. We need your dollars to make each minute count in the fight against cancer.

With \$70, we can buy an eyepiece micrometer . . . \$48 buys a laboratory flowmeter...\$15 buys an instrument sterilizer . . . \$3.75, a hematocrit reader.

Only you can decide how much you can afford to send. But send it *today*, to help us keep moving ahead in the struggle to save lives.

Send a generous check to "Cancer" c/o your local Post Office.

AMERICAN CANCER SOCIETY

Books and other Aids . . .

How to Prepare Art and Copy for Offset Lithography

By William J. Stevens and John McKinvan

Twelve chapters with over 125 illustrations, two- three- and four-color lithography throughout. 8½ x 11", cloth-bound, hard covers. A colorful and highly useful book for your library. Widely used in schools.

POSTPAID \$5.25

Color Chart for Dot Etching

This chart, composed of four sheets, is 22½ x 26½", and is bound at the top with a metal strip for wall hanging. The first sheet is magenta, cyan blue, process yellow and black. The second is warm red, cyan blue, process yellow and black. Number three is magenta, warm blue, process yellow and black, while the last is warm blue, warm red, process yellow and black.

Each of the four pages contains 215 color squares. Each square of color is identified, and each square is divided into four different percentage screen tints. It was produced on regular offset stock on a two-color offset press.

COMPLETE FOUR-PAGE WALL CHART — \$10

"The Single Color Offset Press"

By I. H. Sayre

Different types of offset presses are detailed; then the step by step mechanical operation and adjustments of four Harris-Seybold Co. presses — the earlier sheet-fed LSB and LSN, and the newer models with selective stream and sheet feeding, LTV (17 x 22) and LTW (21 x 28). Webendorfer presses (Chief, Little Chief and Big Chief) are discussed with complete instruction for operation, followed by a discussion of the larger presses — the EBCO (Miller Printing Machinery Co.) and the Miehle 29 and Miehle 36.

The book points up the general similarity of handling of the various presses, at the same time explaining the special characteristics of each. Primary objective of the book is to acquaint the reader with the precision and care that is required in handling offset presses, and to demonstrate how to obtain trouble-free operation.

In addition to the specific treatment on presses, there is a section on blankets, papers, inks, rollers, plates, fountain solutions, and other materials used by offset lithography.

The book is cloth bound in bright red, washable cover, 255 illustrations, printed on offset enamel stock, and sewed in 16"s so that it lays open flat. \$6.50 plus postage.

Point of Purchase Cardboard Displays

By Victor Strauss

First complete book covering the subject. Contains visuals of all kinds of displays, with a complete construction plan for each one shown. There are 226 blueprints, coded and self-explanatory. Discussion covers dummies, instruction sheets, cartons, packing and shipping. Another section covers items such as motors, flashers, rivets, hooks, rubber bands and other fasteners and devices.

It's 9 x 12", 218 pages, and a book every display man will need. Price, \$15.00.

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Modern Lithography

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Enclosed is payment. Please send the book (or chart), as checked

- ☐ How to Prepare Art & Copy — \$5.25
- ☐ The Single Color Offset Press — \$6.50
- ☐ Color Chart for Dot Etching — \$10.00
- ☐ Point of Purchase Cardboard Displays — \$15.00

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Street

City, Zone, and State

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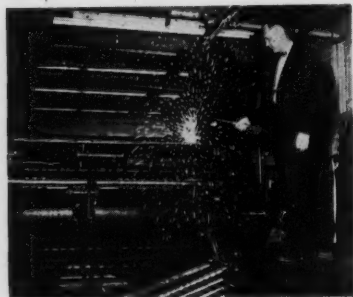
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TALE ENDS

THERE once was a pressman named Ferd,
Who saw, in his fountain, a bird.
He climbed up to shoo it,
But fell right into it
(His pH was three and one-third)

ML

That popular indoor sport—knocking hell out of the outmoded offset press—is back in the news this month. Shown putting the torch to a 35 x 68"



Harris-Seybold press, built in 1935, is Fred B. Underman, president of Danner Press, Inc., Akron, O. The one-color press is being replaced by a new Harris 52 x 76" two-color press which is capable of turning out better reproductions at four times the capacity and speed of the old model.

ML

More business for lithographers should be assured if a recent prediction made at the spring meeting of the Association of National Advertisers is accurate. A special survey of its members disclosed that 69 percent plan to increase their outlays for advertising this year. An overall rise of 10 percent was forecast.

Annual expenditures for advertising have become, in some companies, the largest single item in the annual budget, it was pointed out.

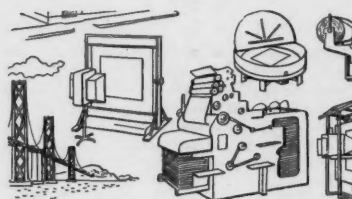
ML

An exploring Chicago Tribune reporter with a camera penetrated the trophy room in the home of Richard T. Hankel, Chicago printer-lithogra-

pher and came out with an illustrated Sunday feature story for the March 17 issue, which told of the 68-year old Mr. Hankel's adventures last summer on a 3,000 mile trip through the African big game country. Brought back were skins of rhinos, tigers, the kudu, and other jungle denizens, along with curios collected from the natives, several thousand feet of motion picture film and many tales of adventure. Not the least of these was

Mr. Hankel's account of how he succeeded in saving his life when a herd of wild elephants charged him. And has Mr. Hankel had enough? Well, next year, he remarked, he is planning another safari into Portuguese West Africa.

ML



Sidelight on Lithotype Process Co. (see July ML): the company has papered its office area using a design incorporating the graphic arts motif shown in the drawing above.

*Why Take Two, When One
Is Obviously So Much Better?*



YEP, whether it's maids or magazines you're picking, experience proves that it's always smarter to concentrate on the best one! And the best magazine in the litho field is, of course,

MODERN LITHOGRAPHY

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Zenogloss C.25.
Zenogloss Cover C.25.
Lithogloss C.35.
Catskill Litho C.15.
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THE
MARTIN CANTINE COMPANY

Specialists in Coated Paper since 1888
Saugerties, N. Y. and New York City
In San Francisco and Los Angeles
Wylie & Davis

photo by Edw. C. Wilson

The Graphic Arts will take a common cattail, call it something fancy like *Typha latifolia*, photograph it at a pleasing angle, retouch the print if necessary, make a fine-screen duotone of it, print it on a Cantine coated paper—and sell it! Few are the products today that don't need the finest embellishment the Graphic Arts can give—and Cantine's Coated Papers to bring out every dot, highlight and shadow in the printing.

Cantine's Coated Papers



SABER controls four-ton muscles to clamp an egg

To smash an egg is easy . . . but to hold one firmly—without breaking it—under a paper cutter clamp that can exert 4½ tons pressure is another story. In a recent Saber demonstration, we did just that.

Eggs, of course, are not what you want to clamp. The point this fragile egg—delicately but firmly held—illustrates is the degree of clamp control possible using the Seybold Saber's foot treadle. Feather touch or a giant's grip . . . delicate leverage for gauging ahead of the cut or full pressure for smashing books . . . the Saber clamp can apply it.

And even more important is the waste and spoilage eliminated by the completely *automatic* feature of the Saber's clamp control. The clamp cushion-contacts the pile gently. No pile disturbance. Then full, preselected clamping pres-

sure is applied immediately before the knife enters the pile and holds until the full cutting cycle is completed.

That's the story all the way with the Seybold Saber® paper cutter. Positioning, clamping, cutting—each operation is smooth and sure and fast. *And safe.* We'd like to show you how your company can profit with a Saber. We'll arrange a showing of our color film, "The Safer Saber"; a demonstration of the Saber at work; or send you our latest literature. Call your Harris-Seybold sales representative or write . . .



HARRIS-SEYBOLD

4510 East 71st Street, Cleveland 5, Ohio

